









## **Somerset County Council**

Somerset County Council Transport Policies Strategic Environmental Assessment Environmental Report

Appendix 4: Assessment of Draft Plan – Assessment Matrices

Prepared for:

Somerset County Council Taunton

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Date: October 2010

Project or Issue Number: **UK1815830** 

Contract/Proposal No: UK1815830

Issue:

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Date: October 2010

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Version	Version Control Record				
Issue	Description of Status	Date	Reviewer Initials	Authors Initials	
1	First Draft to Client	15/07/10	JC	EJ	
2	FINAL Draft to Client	07/10/10	JC	EJ	

## 1 SEA Topic: Health

Sustainability issues identified through the policy review and collection of baseline data include:

• An ageing population which needs to be considered in the provision of services and transport. There is predicted to be a 14% rise in the total population of Somerset by 2025. The population aged 65 and over is set to grow by 55% over the same period and the over 85s by 73% (Somerset NHS Annual Public Health Report, 2008/2009).

- **Poor and worsening air quality in Taunton and Yeovil** especially and road traffic noise along a number of sensitive routes including the stretches of the M5, A38, A358, A303, A3088, A37 and the A39. According to the Taunton Transport Strategy Review (which is looking at the area which will experience the most growth in traffic) forecast improvements in vehicle technology mean that emissions of local pollutants PM10 and NOX are forecast to decrease in the future baseline despite forecast traffic growth.
- As a general rule for there to be a perceptible **change in noise levels** there has to be a change of 3dBA which equates to a doubling or halving of traffic flow. The Taunton Transport Strategy Review (which is looking at the area which will experience the most growth in traffic) found that changes in annoyance associated with noise are generally small in scale for the future baseline with the exception of Fore Street/East Street in Taunton.
- Child road accident statistics are higher than target and pedestrian accidents have increased in the last year of data. Severity of car
  accidents may decrease in the longer term due to improved vehicle design and increased safety awareness amongst the public.
  However, in the absence of the measures in the Somerset County Council Transport Policies the assumption needs to be that accident
  levels remain at a similar level at least in the short term; and
- Obesity and childhood obesity are increasing; less than 25% of people in Somerset undertake as much physical activity as recommended and the number of people cycling is below target. However, cycling and walking in the Taunton Strategy Study Area in particular is higher than the national average. In the absence of measures in the Somerset County Council Transport Policies to promote walking and cycling, levels of walking and cycling are likely to decline. This will have a negative effect on obesity levels.

The SEA is assessing the Somerset County Council Transport Policies against the following objectives:

Somerset County Council Transport Policies SEA objective. Will the Transport Policies	Somerset County Council Transport Policies SEA question. Will the Transport Policies
1. Health	
1a: Improve the safety of the transport system?	<ul> <li>Lead to a decrease in traffic accidents /accident severity and help to meet KSI targets (link to LAA indicator NI 47 on road accidents)?</li> </ul>
1b: Make healthier modes of travel easier and more attractive?	<ul> <li>Increase walking and cycling and help to meet the Somerset SCS target to increase the number of children and adults regularly participating in physical activity (link to LAA indicator NI 56 on obesity; NI 121 on circulatory disease; NI 137 on life expectancy)?</li> </ul>
1c: Reduce the impact of the transport system on air and noise pollution?	<ul> <li>Reduce traffic/congestion that affects an AQMA or would help to meet air quality objectives?</li> </ul>
	<ul> <li>Cause any changes to traffic levels (particularly a change of over 10%) or the nature of traffic (*) past sensitive receptors or on sensitive routes (**) that would help to achieve WHO noise guidelines?</li> </ul>
	Reduce traffic in tranquil areas?

Please note that where it is judged that policies will have no impact on an SEA objective they have been screened out and, therefore, have not been addressed within the assessment matrices.

The effect	he effect of the draft plan on health			
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures	
Goals	1a: The goals address road safety, traffic accidents and security issues. It will be positive for safety.	+		
	1b: The goals address getting people to walk and cycle more and this will be positive for healthier modes.	+		
	1c: The goals address encouraging more sustainable modes of transport and helping communities to travel less and if these are effective in getting people to use their cars less it will be positive in terms of air and noise pollution.	+		
Policy 1				
Policy 2				
Policy 3	1a:			
	1b:			
	1c: Policy 3 could lead to a reduced impact of the transport system on air and noise pollution if the strategy for improving community transport were successful in contributing to modal shift from private car to community transport.	+		
Policy 4	1a:			
	1b:			
	1c: Policy 4 could lead to a reduced impact on air and noise pollution if the strategy for improving bus transport were successful in contributing to modal shift from private car to bus and community transport.	+		
Policy 5	1a:			

	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
	1b:		
	1c: Policy 5 deals with the type of bus information available to the public and provides methods for the information on existing bus services to adapt to new technologies. This could lead to a reduced impact of the transport system on air and noise pollution by improving the range of local bus information available and thus encouraging people to shift from private car to bus.	+	
Policy 6	1a:		
	1b: Developing services to create a comprehensive One Stop Shop for transport information and advice across all modes of travel may encourage more walking and cycling leading to a positive impact in terms of promoting healthier modes of travel.	+	
	1c: Policy 6 could lead to a reduced impact on air and noise pollution if were successful in contributing to modal shift away from private car and reducing congestion. This should be particularly successful as research has indicated that people can't always find the travel information that they need within the county.	+	
Policy 7	1a: The policy aims to influence the design and implementation of infrastructure. This will help to make cycling routes safer.	+	
	1b: The Chief Medical Officer advises that adults should undertake a daily minimum of 30 minutes of physical activity. Incorporating walking and cycling into everyday life can be an easy way to get enough exercise. Policy 7 can contribute positively towards making healthier modes of transport easier and more attractive by implementing initiatives that help to plan improvements to cycling networks.	+	
	1c: Policy 7 could lead to a reduced impact on air and noise pollution by encouraging modal shift from other modes of transport to walking through initiatives such as those discussed in 1a & 1b.	+	

	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
Policy 8	1a: The safety of the transport network for pedestrians would be improved through the implementation of measures including upgrading crossing facilities, addressing gaps in the provision of safe walking routes to schools and by reducing conflicts between pedestrians and cyclists.	+	
	1b: The Chief Medical Officer advises that adults should undertake a daily minimum of 30 minutes of physical activity. Incorporating walking and cycling into everyday life can be an easy way to get enough exercise. Policy 8 can contribute positively towards making healthier modes of transport easier and more attractive by implementing initiatives that improve the pedestrian environment and by working with partners to promote walking as the most sustainable, accessible and healthy form of transport. Evidence shows that traffic management measures are important in encouraging people to walk and the policy includes measures to re-allocate road space to the pedestrian.	+	
	1c: Policy 8 could lead to a reduced impact on air and noise pollution by encouraging modal shift from other modes of transport to walking through initiatives such as those discussed in 1a & 1b, by building sustainable development where walking is given a high priority and by avoiding the severance of walking routes.	+	
Policy 9	1a: The safety of the pedestrian network should be improved by working with the Safe Routes to School team, Policy Planners and others to identify PRoW on the urban fringe that link to nearby communities, schools, services, public open space etc that could be upgraded/improved to restricted byway or bridleway to serve as multi-use routes.	+	
	1b: Policy 9 can contribute positively towards making healthier modes of transport easier and more attractive by implementing initiatives that improve the pedestrian environment and improve the availability of PRoW information. Examples include enhanced signage and waymarking, support of physical and mental health initiatives and developing publications and services to promoted trails.	+	

	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
	1c: Policy 9 could lead to a reduced impact of the transport system on air and noise pollution by encouraging modal shift from other modes of transport to walking through initiatives such as those discussed in 1a & 1b.	+	
Policy 10	1a:		
	1b: The main way that the strategies can contribute to this objective is to increase cycle parking at stations (as all stations in Somerset currently have inadequate cycle parking). The policy is positive in that it addresses improving the consistency of the type of facilities that stations provide but it does not directly address cycle parking directly. Due to the fact that all stations in Somerset currently have inadequate cycle parking and increasing cycling is a key objective of the plan the policy should address cycle parking directly.	?	Mitigation measure: Due to the fact that all stations in Somerset currently have inadequate cycle parking and increasing cycling is a key objective of the plan, it would be appropriate for Policy 10 to refer to improved cycle parking directly.
	1c: Policy 10 could lead to a reduced impact of the transport system on air and noise pollution by encouraging modal shift from private car to rail through initiatives such as promoting the improved the consistency the type of facilities that stations provide and research into the need for new services. This will have a positive cumulative effect in association with the Great Western Route Utilisation Strategy which includes several schemes to increase capacity, journey times and services on several of the lines through Somerset. The Great Western Route Utilisation Strategy also includes a stakeholder aspiration to reopen a station in Wellington. If the station does re-open this could help to reduce commuting traffic to and from Wellington.	+	
Policy 11	1a: Policy 11 will work to mitigate the safety effects of electric vehicles (stemming from the fact that they are harder to hear).	+	Enhancement measure: Policy 11 could be clearer in setting out how it will mitigate for the safety effects of electric vehicles (i.e. the fact that they are quieter and more difficult for pedestrians and other vehicles to hear).

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The effect of	The effect of the draft plan on health				
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures		
	1b:				
	1c: Policy 11 could lead to a reduced impact on air and noise pollution by encouraging modal shift from fossil fuelled private car to new technologies such as electric vehicles through initiatives such as supporting the provision of electric vehicle charging points at locations and encouraging developers to install electric sockets in new developments. In addition Policy 11 could lead to a reduced impact of the transport system on noise pollution as electric vehicles have quieter engines.	+			
Policy 12	1a:				
	1b:				
	1c: Policy 12 aims to implement a strategy to deal with isolated locations of noise pollution.	+			
Policy 13					
Policy 14	1a:				
	1b:				
	1c: The plan aims to reduce congestion by tackling the most congested parts of the road network to make journeys quicker and more reliable. If this is successful this will be positive for noise and air pollution.	+			
Policy 15	1a:				
	1b: Policy 15 can contribute positively towards making healthier modes of transport easier and more attractive through measures such as supporting bus priority measures and ensuring developments support the use of ICT to reduce the need to travel.	+			
	1c: Policy 15 could lead to a positive impact on air and noise pollution if it	+			

	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
	were successful in contributing to modal shift from private car.		
Policy 16			
Policy 17	1a: Enforcing parking and stopping restrictions will be positive for safety (especially for people with disabilities).	+	
	1b: Policy 17 can contribute positively towards making healthier modes of transport easier and more attractive by providing well located, well designed parking facilities for disabled people and through the provision of pedal cycle parking.	+	
	1c: Policy 17 will have some positive impacts on congestion and air pollution through reducing opportunities to park easily in towns and through provision of alternatives to parking in town centres. Depending on the location of the park and ride sites they may introduce noise and air quality issues in sensitive areas. Somerset County Council has indicated that little information about the impact of these schemes is available. Therefore, it is not possible to assess the direct impact as the location of the park and ride sites are unknown. It is also unclear from this policy the implication of providing parking levels that depart from the standards as, if higher levels of parking are provided it may have a negative impact as levels of private cars use may remain the same or increase.	?	Mitigation measure: Under Policy 17, further assessment work is needed on the new park and ride sites before development goes ahead and appropriate mitigation measures need to be put in place if needed. Policy 17 or its supporting text should make reference to the scheme appraisal processes that Somerset County Councillas in place and should make it clear when and how this process will be undertaken.
			Mitigation measure: Policy 17 should make it clear what is meant by departur from the parking standards and whethe this means that more parking would be sanctioned for certain sites.
Policy 18	1a: Policy 18 includes measures which will help drivers to avoid inappropriate (and therefore potentially unsafe) routes and should have a positive effect on	+	

	Impact of the option (including if appropriate nature and spatial extent	Significance of	Suggested mitigation and
	of the impact, probability, duration, frequency and reversibility)	the effect	enhancement measures
	safety.		
	1b:		
	1c:		
Policy 19	1a: Regular monitoring of the Council's transport assets ensures that safety standards can be maintained by making sure the latest information is available on the state of the assets and how this may affect safety. Prioritising maintenance work ensures that safety standards can be maintained by making sure that the areas most in need of repair are tackled first.	+	
	1b:		
	1c:		
Policy 20	1a: Policy 20 can contribute positively towards the safety of the transport network by working with children to improve their awareness of safety issues.	+	
	1b: Policy 20 can contribute positively towards making healthier modes of transport easier and more attractive by working with schools with the highest levels of children being driven to school (who live within a reasonable walk to school distance) and by enhancing the level of cycle training delivered and encouraging children to walk to school more often.	+	
	1c: Policy 20 could lead to a reduced impact of the transport system on air and noise pollution through initiatives to encourage modal shift away from private car and measures to reduce congestion such as improving integration of school travel planning and the provision of school transport.	+	
Policy 21	1a: Policy 21 can contribute positively towards the safety of the transport network through the Road Safety Strategy.	+	
	1b:		

	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
	1c:		
Policy 22	1a: Policy 22 includes many measures that should help to reduce motorcycle casualties and help to reach the target of 33% reduction in killed and seriously injured from motorcycle accidents.	+	Enhancement measure: A number of measures were suggested as part of the options assessment that could be low cost ways of improving motorcycle safety and these should be considered for the final plan under Policy 22. These measures are further engaging with key stakeholder groups, continuing to seek opportunities to gather feedback from riders and ensuring that the needs of motorcyclists are considered in traffic calming schemes.
	1b:		
	1c: Motorcycles can be causes of noise pollution but there can also be substantial environmental benefits from increased motorcycle use compared to car use, including lower emissions of certain air pollutants and lower fuel consumption. It will be important that the Council promotes the safe and responsible use of smaller machines (as bigger machines have little pollution benefit over cars). The plan does discuss a Moped Loan Scheme that will help to achieve this but if other measures can be included to promote smaller machines they should be included in the policy.	+	Enhancement measure: If other measures can be included in the plan (apart from a Moped Loan Scheme) to promote smaller powered two wheelers they should be included in Policy 22.
Policy 23	1a:		
	1b: The policy aims to give people opportunities to travel in more healthy ways.	+	
	1c:		
Policy 24			

The effect	of the draft plan on health		
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
Policy 25	1a:		
	1b:		
	1c: The cumulative effect of Policy 25 in association with the other measures in the plan to provide more sustainable forms of transport should be positive.	+	
Annex A	1a:		
	1b: Annex A could lead to an increase in walking and cycling through planned improvements to cross-boundary National Cycle Network links, for example Route 24 Bath/Radstock/Frome, the Axe River crossing at Brean, routes on Exmoor, and a route between Yeovil and Sherborne.	+	
	1c: Annex A could lead to a positive impact on air and noise pollution if it were successful in contributing to modal shift from private car to rail by implementing various rail service improvements and bus and coach improvements. Liaison on traffic management issues where diversionary routes are likely to impact on smaller settlements should contribute to a positive impact on air and noise pollution in more tranquil areas.	+	
Annex B: Ta	aunton Area and Yeovil Transport Measures		
Area wide	1a: The initiatives will be positive for safety as they aim to ensure the design of new schemes considers safety for all.	+	
	1b: The plan can contribute positively towards making healthier modes of transport easier and more attractive by implementing initiatives such as working with schools and businesses to promote walking, cycling and providing information to help make informed choices.	+	
	1c: The plan could lead to a reduced impact of the transport system on air and noise pollution through the promotion of electric vehicles and by reducing congestion through the management of traffic to make better use of the road network, ensuring HGV deliveries take place outside main shopping and	+	

	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
	commuting hours and improving Community Transport.		
Bridgwater	1a: The options assessment undertaken on the Taunton Transport Strategy review showed that none of the options assessed would help fully to meet targets of reducing people killed and seriously injured on the road. However, many of the schemes identified will help contribute positively towards the safety of the transport network for pedestrians through the implementation of 20 mph zones, traffic calming, pedestrian priority, shared spaces etc in town centres and by improving junctions considering needs of non-car users. Therefore, the strategy has been assessed as minor negative.	-	Mitigation measure: As schemes are implemented as part of Annex B their impact on accidents should be investigated and options for improving their safety performance considered. Annex B should make reference to the scheme appraisal processes that Somerset County Council has in place and should make it clear when and how this process will be undertaken.
	1b: High levels of traffic in the town centres makes walking and cycling unattractive and the options assessment suggested that a strategy should be taken forward that improves walking and cycling infrastructure but also improves the cycling and walking environment in terms of traffic flow. The plan contributes positively by improving walking and cycling infrastructure and also introduces some measures to encourage modal switch. If these measures are positive in reducing traffic levels there will be a minor positive impact on encouraging healthier modes of travel.	+	
	1c: Research has shown that 65% of trips less than 1 km are made by car and this has negative effects on air quality. The plan introduces measures to encourage modal switch. If these measures are positive in reducing traffic levels there will be a minor positive impact on air and noise pollution. Modelling data on air quality and noise were not presented for Bridgwater as part of the Taunton Transport Strategy Review but the information presented did show a decrease in traffic in many routes in the town (which is likely to lead to an improvement in noise and air pollution).	+	
Taunton	1a: As Bridgwater above	_	As Bridgwater above

	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
	1b: As Bridgwater above	+	
	1c: Research has shown that 65% of trips less than 1 km are made by car and this has negative effects on air quality, especially in Taunton where an AQMA has been declared. Annex B introduces measures to encourage modal switch. If these measures are positive in reducing traffic levels there will be a significant positive impact on air and noise pollution. Modelling undertaken as part of the Taunton Transport Strategy Review showed reductions in atmospheric pollutants relative to the Baseline in 2026. There are some significant reductions in NOx in Taunton on North Street, A358 at Henlade and the Northern Inner Distributor Road. Particulates are generally comparable to the Baseline. Changes in forecast noise levels are generally small relative to the 2026 baseline. This is likely to be a long term effect (in the absence of funding some of the schemes are not likely to go ahead in the short term).	++	
Vellington	1a: As Bridgwater and Taunton above	-	As Bridgwater and Taunton above
	1b: As Bridgwater and Taunton above	+	
	1c: Research has shown that 65% of trips less than 1 km are made by car and this has negative effects on air quality. Annex B introduces measures to encourage modal switch and reduce heavy traffic flows in town (including a new road between the Taunton Road and the B3187). If these measures are positive in reducing traffic levels there will be a minor positive impact on air and noise pollution.	+	
Yeovil highway	1a: Several of the junctions outlined in the policy for improvement are minor accident blackspots. Improving the junctions should help to reduce minor accidents and improve the safety of junctions for car drivers and pedestrians (at the moment it is difficult to see pedestrians at some of the junctions).	+	
	1b:		

The effect of	of the draft plan on health		
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
	1c: Junction improvements should help traffic to run more smoothly which should help to reduce air and noise pollution.	+	
Yeovil non highway	1a: Cycling and walking improvements should help to make walking and cycling safer within Yeovil.	+	
	1b: The policy includes a number of measures which will have a positive impact on helping to make healthier modes more attractive. These include a comprehensive walking and cycling network, improved cycle parking provision and cycle links between Ilchester and Yeovilton.	+	
	1c: The policy proposes information measures, personalised travel planning, bus station improvements, programmes for behavioural change and improved public transport services. If all of these measures together help to facilitate modal shift, air and noise pollution should improve. The parking review may also be positive if car parking charges are set in such a way as to encourage modal shift.	+	
Implementat	ion Stage (assessment of the Draft Implementation Plan and Technical Note	on Transport and	Development)
is yet to be fill known. The and that fund road safety p available to eforeseeable f short term as infrastructure walking and of "Transport ar development"	n of the implementation plan has been assessed. The final implementation plan halised and the levels of resources available to the County Council are not plan stresses that maintenance of the highway network is likely to be a priority ing will be set aside to deliver the road safety objectives as agreed through the artnership. This should be positive for safety but it is likely that the funding incourage healthier modes of travel is going to be much reduced for the uture. Without mitigation this could cause a significant negative effect in the traffic is likely to increase (with development and in the absence of to support more sustainable modes) and this will discourage people from cycling. However, the council have now produced a document entitled and Development" and this outlines the steps the council will take to ensure that is planned in a sustainable way. With declines in funding there is still a risk that cts may occur, but with the process outlined in the document above this will not	-	

The effect of the draft plan on health				
Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures		
be a significant negative effect.				

#### Assessment Conclusions - health

#### **Summary of performance:**

Only one of the policies is likely to have a significant positive effect on the health SEA objectives. This is the policy for Taunton in Annex B which shows a significant positive effect with regards to air pollution. Modelling undertaken as part of the Taunton Transport Strategy Review showed significant reductions in nitrogen dioxide on some routes in the town as a result of the schemes presented as part of the policy. None of the other policies are likely to have a significantly positive effect on the health SEA objectives. Somerset County Council Transport Policies document largely performs well against the health SEA objectives as the Somerset County Council Transport Policies includes policies that will:

- Help improve health through encouraging modal shift from private car to more sustainable modes of travel (thus improving air quality and reducing nuisance from traffic noise);
- Help to make healthier modes of transport more attractive through improving walking and cycling routes;
- Improve the safety of the transport system through effective highway maintenance;
- Help to manage the impacts of freight traffic; and
- Introduce safety education programs and programmes such as safer routes to schools.

All of these measures, when implemented (recognising that the assessment of the Implementation Plan has shown that they are not likely to be implemented in the short term), will help to improve health and safety within Somerset. Many of the policies are likely to inter-relate to have a cumulative positive effect on health and safety. Many of the policies on public and community transport, parking, walking and development planning will be mutually re-enforcing in helping people to decide to switch to more sustainable modes. As people switch to more sustainable modes, traffic and congestion improve as does air quality, accident rates and noise. These improvements are then positive in helping more people to decide that walking and cycling is safe and pleasant.

The rail policy and the parking policies have an uncertain impact on the health SEA objective. Although the rail policy discusses improving station facilities it is not clear whether this includes increasing cycle parking. Due to the fact that all stations in Somerset currently have inadequate cycle parking it would be useful for this policy to directly address the issue. The parking policy also shows an uncertain impact. This is firstly, because there is currently no information available about the likely impact of the park and ride sites proposed, and secondly because of uncertainties regarding the intent of the policy regarding departure from parking standards.

Some of the policies are likely to cause a minor negative impact. The policies for Taunton, Bridgwater and Wellington show a minor negative effect on accidents. This is because modelling has shown that the policies would not help fully to meet targets of reducing people killed and seriously injured on the

#### Assessment Conclusions – health

road. However, many of the schemes identified will help contribute positively towards the safety of the transport network for pedestrians through the implementation of 20 mph zones, traffic calming, pedestrian priority, shared spaces etc in town centres and by improving junctions considering needs of non-car users.

As with the other SEA objectives, there is some uncertainty over the implementation of the schemes in the strategies and the Implementation Plan in its current form is likely to have a minor negative effect due to the likely reduction in funding available (it is recognised that the Implementation Plan is a draft and may change once levels of resources are known). The plan stresses that maintenance of the highway network is likely to be a priority and that funding will be set aside to deliver the road safety objectives as agreed through the road safety partnership. This should be positive for safety but it is likely that the funding available to encourage healthier modes of travel is going to be much reduced for the foreseeable future.

### Mitigation and enhancement measures:

#### Mitigation measures identified to address potential negative or uncertain effects are as follows:

- Under Policy 17, further assessment work is needed on the new park and ride sites before development goes ahead and appropriate mitigation measures need to be put in place if needed. Policy 17 or its supporting text should make reference to the scheme appraisal processes that Somerset County Council has in place and should make it clear when and how this process will be undertaken.
- Policy 17 should make it clear what is meant by departure from the parking standards and whether this means that more parking would be sanctioned for certain sites.
- As schemes are implemented as part of Annex B their impact on accidents should be investigated and options for improving their safety performance considered. Annex B should make reference to the scheme appraisal processes that Somerset County Council has in place and should make it clear when and how this process will be undertaken.

## Enhancement measures identified in order to improve the performance of the plan are as follows:

- A number of measures were suggested as part of the options assessment that could be low cost ways of improving motorcycle safety and these should be
  considered for the final plan under Policy 22. These measures are further engaging with key stakeholder groups, continuing to seek opportunities to
  gather feedback from riders and ensuring that the needs of motorcyclists are considered in traffic calming schemes.
- If other measures can be included in the plan (apart from a Moped Loan Scheme) to promote smaller powered two wheelers they should be included in Policy 22.
- Policy 11 could be clearer in setting out how it will mitigate for the safety effects of electric vehicles (i.e. the fact that they are quieter and more difficult for pedestrians and other vehicles to hear).

# 2 SEA Topic: Community

Sustainability issues identified through the policy review and collection of baseline data include:

• **People generally feel safer** in Somerset and feel that anti social behaviour is less of an issue than people in the UK on average. There are so many factors driving this issue the future baseline is impossible to predict

- Community severance caused by large volumes of traffic. The spatial strategy for Somerset will mean that most development occurs in SSCTs (Taunton, Bridgwater and Yeovil) and category B towns (most of the larger towns in the county. In the absence of the Somerset County Council Transport Policies severance in these communities is likely to increase and will affect the quality of the townscape in those areas
- Development in Somerset will occur mainly in larger towns and adequate transport is needed to support this. In the absence of
  measures promoted through the Somerset County Council Transport Policies development will not be supported by adequate sustainable
  transport and will cause future problems of pollution and congestion.

The SEA is assessing the Somerset County Council Transport Policies against the following objectives:

Somerset County Council Transport Policies SEA objective. Will the Transport Policies	Somerset County Council Transport Policies SEA question. Will the Transport Policies
2. Communities	
2a: Help to improve the quality of urban and rural centres?	<ul> <li>Reduce traffic levels, congestion or the nature of traffic (*) in residential areas / town and village centres?</li> <li>Cause changes that reduce the impact of the transport system on townscape (this could include changes to highway signage, lighting and highway furniture) or introduce features that enhance the character of towns?</li> <li>Support the spatial strategy for the area including providing improvements to transport in rural areas?</li> </ul>
2b: Improve the security of the transport system?	Make transport systems / interchanges more secure and contribute to the targets in the Somerset Crime Reduction and Drugs Strategy to reduce the fear of crime and reduce anti social behaviour?
2c: Reduce the community severance effects of transport?	Result in a reduction in community severance (i.e. improved crossing facilities, reduced traffic speed, reduced traffic levels)?

Please note that where it is judged that policies will have no impact on an SEA objective they have been screened out and, therefore, have not been addressed within the assessment matrices.

The effect	The effect of the draft plan on community				
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures		
Goals	2a: The goals address protection of the countryside but do not address protecting the valued townscapes of Somerset (see also assessment against 5b).	-	Mitigation measure: The living sustainably goal should be extended to address protection of the heritage and townscape of Somerset.		
	2b: The goals address security issues. It will be positive for improving the security of the transport system.	+			
	2c: The goals address encouraging more sustainable modes of transport and if these are effective in getting people to use their cars less it will be positive in terms of severance.	+			
Policy 1					
Policy 2					
Policy 3	2a: Policy 3 would have a positive impact in improving the quality of urban and rural centres if it were successful in contributing to reduced traffic levels through modal shift from private car to more sustainable modes of transport.	+			
	2b:				
	2c: Policy 3 would have a positive impact in reducing severance if it were successful in contributing to reduced traffic levels through modal shift from private car to more sustainable modes of transport.	+			
Policy 4	2a: Policy 4 would have a positive impact in improving the quality of urban and rural centres if it were successful in contributing to reducing congestion through modal shift from private car to more sustainable modes of transport.	+			
	2b:				
	2c: Policy 4 would have a positive impact in reducing severance if it were successful in contributing to reduced traffic levels through modal shift from private car to more sustainable modes of transport.	+			

	Impact of the option (including if appropriate patrons and special sector)	Cinnificance	Commented mitigation and
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
Policy 5	2a: Policy 5 would have a positive impact in improving the quality of urban and rural centres if increased information were successful in contributing to modal shift from private car to bus. This will give new bus users additional information to reduce confusion and encourage bus use through new technologies such as mobile phones.	+	
	2b:		
	2c: Policy 5 would have a positive impact in reducing severance if it were successful in contributing to reduced traffic levels through modal shift from private car to more sustainable modes of transport.	+	
Policy 6	2a: Policy 6 would have a positive impact in improving the quality of urban and rural centres if it were successful in contributing to modal shift from private car to more sustainable modes of transport. This could be achieved through measures such as improving information across all modes of travel and improving information on integration between modes. This would be successful as a survey carried out in March 2010 found that lack of knowledge about alternatives was stopping people from using public transport.	+	
	2b:		
	2c: Policy 6 would have a positive impact in reducing severance if it were successful in contributing to reduced traffic levels through modal shift from private car to more sustainable modes of transport.	+	
Policy 7	2a:		
	2b:		
	2c: Policy 7 can help reduce community severance by examining gaps and barriers in our cycling network.	+	

	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
Policy 8	2a: Policy 8 would have a positive impact in improving the quality of urban and rural centres through measures such traffic management measures which reallocate road space to the pedestrian.	+	
	2b: Policy 8 seeks to reduce the fear of crime through good design and improving existing facilities on pedestrian routes, including reducing conflicts between pedestrians and cyclists.	+	
	2c: Policy 8 can help reduce community severance by improving and upgrading crossing facilities and by avoiding the severance of walking routes by ensuring accessibility policies are adhered to during development planning.	+	
Policy 9	2a: Policy 9 would have a positive impact on improving the quality of urban and rural centres if it were successful in contributing to modal shift from private car. In addition, Policy 9 includes the assessment of urban/urban fringe PRoW in Taunton, Yeovil, Bridgwater and the market towns that would be suitable for furniture removal or replacement with less restrictive furniture. This would be positive for rural centres and areas on the fringe of centres.	+	
	2b:		
	2c: Policy 9 could be positive in reducing severance through improving PRoW (and especially those that link schools, communities and services).	+	
Policy 10	2a: Policy 10 would have a positive impact in improving the quality of urban and rural centres by encouraging modal shift from private car to rail through initiatives such as promoting the improved consistency of station facilities and research into the need for new services. This will have a positive cumulative effect in association with the Great Western Route Utilisation Strategy which includes several schemes to increase capacity, journey times and services on several of the lines through Somerset. The Great Western Route Utilisation Strategy also includes a stakeholder aspiration to reopen a station in Wellington. If the station does re-open this could help to reduce commuting	+	

The effect	of the draft plan on community		
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
	traffic to and from Wellington.		
	2b: Policy 10 makes some general points about improving stations but does not address security issues directly. As security at stations is a concern of some passengers, it would be appropriate for Policy 10 to refer to security improvements directly.	?	Mitigation measure: As security at stations is a concern of some passengers, it would be appropriate for Policy 10 to refer to security improvements directly.
	2c: Policy 10 would have a positive impact in reducing severance if it were successful in contributing to reduced traffic levels through modal shift from private car to more sustainable modes of transport.	+	
Policy 11			
Policy 12			
Policy 13			
Policy 14	2a: The policy should be positive in improving the quality of urban and rural centres through reducing congestion.	+	
	2b:		
	2c: The policy should be positive in reducing severance by reducing traffic levels and ensuring new developments don't make conditions worse for existing drivers.	+	
Policy 15	2a: Policy 15 could lead to a positive impact the quality of urban and rural centres by helping to encouraging modal shift from private car to more sustainable modes of transport.	+	
	2b:		
	2c: Policy 15 could have a positive effect on severance through the schemes to improve the walking network.	+	

The effect of the draft plan on community				
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures	
Policy 16				
Policy 17	2a: Policy 17 could lead to a positive impact on the quality of urban and rural centres by helping to encouraging modal shift from private car to more sustainable modes of transport through provision of Park and Ride sites in Yeovil and Bridgwater, prioritising town centre parking spaces for use by shoppers and visitors and providing all day parking for commuters and visitors in Taunton at Park and Ride sites.	+		
	2b: Policy 17 seeks to reduce the fear of crime by improving actual and perceived safety and security in public car parks.	+		
	2c:			
Policy 18	2a: Policy 18 could lead to a positive impact on improving the quality of urban and rural centres by helping HGV drivers chose the most appropriate route and help to improve the liaison between operators and communities.	+		
	2b:			
	2c: Policy 18 could lead to a positive impact on severance by helping HGV drivers chose the most appropriate route and help to improve the liaison between operators and communities.	+		
Policy 19				
Policy 20				
Policy 21				
Policy 22	2a: Motorcycles make a smaller contribution to overall congestion by taking up less road space than cars (although they are not as positive as public transport in reducing congestion). Therefore, if the strategy is successful in encouraging people to switch from their cars to motorcycles the effect on congestion (and town and village centres) will be positive.	+		

The effect	of the draft plan on community		
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
	2b:		
	2c:		
Policy 23			
Policy 24			
Policy 25			
Annex A	2a: Enhancing rail services on various corridors and bus service enhancements should have a positive impact on reducing congestion and thus improving the quality of urban centres. Management reviews of the freight network and freight routes listed in the policy will also help improve the quality of centres. One area that experiences cross boundary freight traffic at the moment is Cheddar and this policy may help to reduce the impacts in this area.	+	
	2b:		
	2c: Better management of traffic (especially freight traffic) and authorities working together to put in place co-ordinated route hierarchies should be positive for community severance.	+	
Annex B: Ta	aunton Area and Yeovil Transport Measures		
Area wide	2a: Annex B could have a positive impact in improving the quality of urban and rural centres through reducing congestion through the management of traffic to make better use of the road network and ensuring HGV deliveries take place outside main shopping and commuting hours.	+	
	2b: Annex B seeks to reduce the fear of crime by ensuring that the design of new schemes considers safety for all without compromising ease of use for more vulnerable users and by ensuring park and bus sites to be accredited to safe parking standard.	+	

	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
	2c:		
Bridgwater	2a: The strategy includes 20mph zones, traffic calming and pedestrian priority in town centres. However, this is likely to be tempered by an increase in overall traffic due to the level of development expected in Bridgwater. Modelling has shown that three out of five streets in Bridgwater centre will show reductions in traffic. This will have a minor positive impact on the quality of centres.	+	
	2b: The policy does not discuss the security of transport interchanges although better co-ordination of bus and train services should lead to indirect benefit as people are waiting at interchanges for less time.	+	
	2c: Several measures will be positive in improving crossing facilities including pedestrian links between schools and key destinations and improved junctions. It is assumed that severance in North Petherton will be reduced through the building of the North Petherton bypass although Somerset County Council has indicated that little information about the impact of these schemes is available. The policy is likely to be positive for severance on most routes. However, there is one uncertainty related to the policy. One of the initiatives is simply listed as "reduce severance caused by roads carrying high volumes of traffic". It is unclear how this will be achieved.	+	Enhancement measure: Annex B should clarify what the following means and how it will be achieved: "reduce severance caused by roads carrying high volumes of traffic".
Taunton	2a: The strategy includes 20mph zones and pedestrianisation in Taunton. However, this is likely to be tempered by an increase in overall traffic due to the level of development expected in the town. Modelling has shown that traffic and congestion /delay in Taunton town centre will be reduced in many areas including the central shopping streets. There is predicted to be an overall reduction in traffic in Taunton town centre of 38%. This will have a significant positive effect on the quality of the centre but this is likely to be in the long term (in the absence of funding the schemes are not likely to go ahead in the short term).	+	

The effect of the draft plan on community			
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
	2b: High quality secure multi storey car parks and improved interchange facilities will be provided and this will help to improve the security of the transport system.	+	
	2c: Additional crossing facilities will be provided in the town centre and this will be positive. It is assumed that severance in Norton Fitzwarren and Henlade will be reduced through the building of the bypasses although Somerset County Council has indicated that little information about the impact of these schemes is available. Modelling has shown that traffic will decrease on the following routes in Taunton: A38 Wellington Road/Wellington New Road, North Street, Corporation Street, Fore Street/East Street, A3038 Station Road/Kingston Road, Bridge Street and Third Way. This varies from a predicted reduction of 6% on the Third Way to 94% on North Street. Five routes are likely to experience an increase in traffic. However, the policy is likely to be positive for severance on most routes.	+	
Wellington	2a: The strategy makes reference to considering pedestrianisation, removal of on street parking and other measures which implemented will have a positive effect on the town centre.	+	
	2b: New park and bus facilities will be provided and this will help to improve the security of the transport system.	+	
	2c: There are several routes in Wellington sensitive to severance including the High Street. Several measures will be positive in improving crossing facilities including pedestrianisation.	+	
Yeovil highway	2a: The junction improvements would help to reduce the negative traffic effects of the development sites in Yeovil. Therefore, the policy would be positive in terms of supporting the spatial strategy.	+	
	2b:		
	2c: The policy would help to reduce severance by improving crossing facilities	+	

The effect of the draft plan on community				
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures	
	at several of the junctions.			
Yeovil non highway	2a: Measures such as pedestrian priority areas should help improve the quality of the town centre.	+		
	2b: Bus station improvements should help to improve the security of the transport system.	+		
	2c: Measures such as pedestrian priority should help reduce community severance.	+		
Implementa	tion Stage (assessment of the Draft Implementation Plan and Technical Note	on Transport and I	Development)	
is yet to be fi known. The and that fund this could car community s infrastructure a document of take to ensur there is still a	on of the implementation plan has been assessed. The final implementation plan nalised and the levels of resources available to the County Council are not plan stresses that maintenance of the highway network is likely to be a priority ling for other areas of the transport system is likely to decline. Without mitigation use a significant negative effect in the short term on the quality of centres and everance as traffic is likely to increase due to development and in the absence of a to support more sustainable modes. However, the council have now produced entitled "Transport and Development" and this outlines the steps the council will be that development is planned in a sustainable way. With declines in funding a risk that negative effects may occur, but with the process outlined in the love this will not be a significant negative effect.	-		

## **Assessment Conclusions – community**

## Summary of performance:

The policies in the Somerset County Council Transport Policies document largely perform well against the SEA objectives as they include measures to help improve the quality of urban and rural centres through:

• Measures to manage traffic better;

### **Assessment Conclusions – community**

- Provision of better pedestrian facilities;
- Measures to manage the impact of freight traffic;
- Parking policies and other measures to reduce congestion; and
- Measures to reduce the impact of vehicular traffic in certain areas.

All of these measures, when implemented (recognising that the assessment of the Implementation Plan has shown that they are not likely to be implemented in the short term), will help the communities of Somerset. In a similar way to the health SEA objective, many of the policies are likely to inter-relate to have a positive cumulative effect on communities. Many of the policies on public and community transport, parking, walking and development planning will be mutually re-enforcing in helping people to decide to switch to more sustainable modes. As people switch to more sustainable modes, traffic and congestion will improve as will air quality, accident rates and noise (thus helping to improve rural and urban centres). These improvements are then positive in helping more people to decide that walking and cycling is safer and pleasant. None of the policies assessed are likely to have a significant positive impact on the community SEA objectives.

The rail policy will have an uncertain impact. Although the policy discusses improving station facilities it is not clear whether this includes security improvements. As security of stations is a concern to some passengers it would be useful for this policy to directly address the issue.

The goal on living sustainability is likely to cause a minor negative impact as it excludes reference to townscapes.

As with the other SEA Objectives, there is some uncertainty over the implementation of the schemes in the strategies and the Implementation Plan in its current form is likely to have a minor negative effect due to the likely reduction in funding available (it is recognised that the Implementation Plan is a draft and may change once levels of resources are known). The plan stresses that maintenance of the highway network is likely to be a priority and that funding for other areas of the transport system is likely to decline. This will cause a negative effect in the short term on the quality of centres and community severance as traffic is likely to increase in the absence of infrastructure to support more sustainable modes.

### Mitigation and enhancement measures:

## Mitigation measures identified to address potential negative or uncertain effects are as follows:

- The living sustainably goal should be extended to address protection of the heritage and townscape of Somerset.
- As security at stations is a concern of some passengers, it would be appropriate for Policy 10 to refer to security improvements directly.

### Enhancement measures identified in order to improve the performance of the plan are as follows:

• Annex B should clarify what the following means and how it will be achieved: "reduce severance caused by roads carrying high volumes of traffic".

# 3 SEA Topic: Economy

Sustainability issues identified through the policy review and collection of baseline data include:

- Up to 31% of people who live in Somerset work outside the county boundary;
- Most people still travel to work by car and a large proportion of pupils are still driven to school;
- There is **congestion** in key points in Taunton, Bridgwater and Yeovil but congestion is better than target due to the economic slowdown;
- The growth in overall traffic mileage is unclear due to changes in fuel prices and economic performance;
- **Number of HGVs using Somerset's strategic routes is declining** but decisions made by other authorities and the use of satellite navigation equipment can cause problems in Somerset.

The SEA is assessing the Somerset County Council Transport Policies against the following objectives:

Somerset County Council Transport Policies SEA objective. Will the Transport Policies	Somerset County Council Transport Policies SEA question. Will the Transport Policies
3. Economy	
3a: Help to manage and maintain the existing transport system efficiently?	Help to manage routes effectively in order to maintain journey times?
3b: Invest in transport improvements that help the economy of Somerset?	<ul> <li>Include schemes that decrease journey times, congestion, improve journey time reliability and help to meet congestion targets in the Somerset County Council Transport Policies?</li> </ul>
3c: Provide more sustainable transport access to rural areas, the countryside and visitor attractions?	<ul> <li>Increase access to tourist attractions, rural areas and the countryside by public transport and help to meet the objective of the Somerset Economic Strategy to revitalise the economy of Somerset's market towns and rural communities?</li> </ul>
3d: Reduce the impact of road freight on communities?	Provide / encourage the use of alternatives to road freight and provide routes for freight traffic that reduces impacts on communities and the environment?

Please note that where it is judged that policies will have no impact on an SEA objective they have been screened out and, therefore, have not been addressed within the assessment matrices.

The effect of the draft plan on Economy			
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
Goals	3a: The goals state the aspiration that transport, roads and new technology links are effective. This should be positive in terms of managing routes effectively.	+	
	3b: The goals address ensuring economic well being. This should be positive in terms of investment in transport improvements.	+	
	3c: Accessing rural areas and the countryside is not addressed by the goals.	-	Mitigation measure: If access to rural areas and the countryside is seen as a priority it should be addressed in the goals.
	3d: Freight issues are not addressed by the goals.	-	Mitigation measure: If freight issues are seen as a priority they should be addressed in the goals.
Policy 1			
Policy 2			
Policy 3	3a:		
	3b: If Policy 3 is successful in contributing to modal shift from cars to community transport, it could have a positive impact on journey times and congestion.	+	
	3c: Policy 3 could have a positive impact on provision of sustainable transport access to rural areas, if services to rural areas are improved.	+	

	Impact of the option (including if appropriate nature and spatial extent	Significance of	Suggested mitigation and
	of the impact, probability, duration, frequency and reversibility)	the effect	enhancement measures
	3d:		
Policy 4	3a: Policy 4 will help to manage routes effectively by seeking opportunities to implement bus priority measures and through improvements to interchanges.	+	
	3b: Policy 4 will help to reduce journey times for public transport through integration of rail and bus services at railway stations and through seeking opportunities to implement bus priority measures.	+	
	3c: Policy 4 will help to improve access to rural areas and the countryside by introducing rural interchange improvements.	+	
	3d:		
Policy 5			
Policy 6	3a:		
	3b: Policy 6 may help to reduce journey times and congestion through improving information provision, such as through development of the Council website and through greater use greater use of technology and information options.	+	
	3c:		
	3d:		
Policy 7			
Policy 8	3a: Policy 8 will have a positive effect through ensuring that highways management benefit pedestrians.	+	
	3b:		
	3c:		

The effect of	of the draft plan on Economy		
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
	3d:		
Policy 9	3a: Policy 9 will be positive in terms of management through helping to inform the Transport Assessment Management Process and ensuring that assets are maintained where possible.	+	
	3b:		
	3c: Policy 9 provides a list of actions in relation to Public Rights of Way (PRoW), such as improvements to the PRoW network and production of updated mapping. The measures will have a positive impact through providing sustainable routes to rural areas and tourist attractions.	+	
	3d:		
Policy 10	3a:		
	3b: Policy 10 sets goals in terms of managing and improving rail timetables, rethinking the standard of station facilities, understanding and researching the need for new rail services and collaborating with the rail industry. These objectives are likely to help to reduce journey times and congestion by encouraging more people to travel by rail. This will have a positive cumulative effect in association with the Great Western Route Utilisation Strategy which includes several schemes to increase capacity, journey times and services on several of the lines through Somerset.	+	
	3c:		
	3d:		
Policy 11			
Policy 12			
Policy 13			

The effect of the draft plan on Economy				
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures	
Policy 14	3a: The plan should be positive in helping to manage the transport system. The policy aims to manage the road network better to improve congestion.	+		
	3b: The plan should help to introduce transport improvements to tackle congestion.	+		
	3c:			
	3d:			
Policy 15	3a:			
	3b: Policy 15 sets out a number of measures which could help to decrease congestion and journey times including ensuring most new developments are located in the main urban areas.	+		
	3c:			
	3d:			
Policy 16				
Policy 17	3a: Policy 17 sets out the strategy for parking management, which includes prioritising town centre parking space, providing all day Park & Ride parking spaces and managing on-street parking restrictions in residential areas. These measures are likely to have a positive impact on the effective management of the transport system.	+		
	3b: Policy 17 sets out the strategy for parking management, which includes prioritising town centre parking space, providing all day Park & Ride parking spaces and managing on-street parking restrictions in residential areas. These measures are likely to have a positive impact on reducing congestion and journey times.	+		
	3c:			

The effect	of the draft plan on Economy		
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
	3d:		
Policy 18	3a: The supporting text to Policy 18 outlines action such as managing and developing interactive routing resources for freight, encouraging dialogue between different groups of road users, understanding and developing routing resources and collaborating with stakeholders to improve integration with other policies. These objectives could help to manage freight routes effectively and balance journey times for operators whilst minimising their effect on communities	+	
	3b		
	3c:		
	3d: The supporting text to Policy 18 outlines action such as managing and developing interactive routing resources for freight, encouraging dialogue between different groups of road users, understanding and developing routing resources and collaborating with stakeholders to improve integration with other policies. The collaboration with stakeholders could help to reduce impacts on communities and the environment.	+	
Policy 19	3a: Policy 19 sets out an aspiration for regular monitoring and improving of Somerset's transport assets and a method for prioritising transport infrastructure maintenance work. This will help to manage and maintain routes effectively.	+	
	3b:		
	3c:		
	3d:		
Policy 20			
Policy 21			

	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
Policy 22	3a:		
	3b: As noted above, motorcycles make a smaller contribution to overall congestion by taking up less road space than cars (although they are not as positive as public transport in reducing congestion). Therefore, if the strategy is successful in encouraging people to switch from their cars to motorcycles the effect on congestion and journey times will be positive.	+	
	3c:		
	3d:		
Policy 23			
Policy 24			
Policy 25			
Annex A	3a: A range of measures are given, relating to improvements to the rail network, bus network, freight routes, cycling and walking routes. These measures will have a positive effect on the management of routes and maintenance of journey times.	+	
	3b: A range of measures are given, relating to improvements to the rail network, bus network, freight routes, cycling and walking routes. These measures will have a positive effect on reducing congestion and improving journey time reliability.	+	
	3c:		
	3d: The measures given include improvements to freight routes and the freight network, and the policy could have a positive impact on reducing the impact of road freight on communities.	+	

The effect of	of the draft plan on Economy		
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
Area wide initiatives	3a: Annex B lists Area Wide Initiatives for ensuring economic well-being in Somerset, which include, for example, management of traffic to make better use of the road network.	+	
	3b: Annex B lists Area Wide Initiatives for ensuring economic well-being in Somerset, which include, for example, improving community transport, and promotion of walking, cycling and public transport use. These measures are likely to have a positive impact on reducing journey times and congestion.	+	
	3c		
	3d: Annex B lists Area Wide Initiatives for ensuring economic well-being in Somerset, which include ensuring HGV deliveries take place outside main shopping and commuting hours. This measure is likely to have a positive effect on reducing the impact of freight traffic.	+	
Bridgwater	3a: Improvements to bus priority should help to maintain good journey times for buses and this will be positive.	+	
	3b: Modelling has shown that three out of five junctions in Bridgwater will see a reduction in delay (taking into account future development levels). However, it is unclear what the impact of improving arterial routes, the North Petherton Bypass, improved links to the A39, the new park and ride routes and the new road adjacent to the M5 is likely to be. Somerset County Council has indicated that little information about the impact of these schemes is available. There is also uncertainty about the level of resources available to implement schemes. The impact has therefore, been scored as uncertain.	?	Mitigation measure: Once more detail is known with relation to the schemes listed in Annex B assessment work should be undertaken to assess the effect of the schemes on congestion and journey times.
	3c: The strategy includes more public transport on rural routes and this will be positive in terms of sustainable access to rural areas.	+	
	3d: Pedestrian priority may reduce the impact of service vehicles on certain areas during the peak period and this should reduce the impact of freight on communities and other users of the town centre.	+	

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The effect	of the draft plan on Economy		
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
Taunton	3a: A number of measures are proposed including variable message signing, real time information and improved bus priority routes. This should help to maintain journey times, especially for buses.	+	
	3b: Modelling has shown that there is a significant reduction in junction delay recorded at many key junctions in Taunton (even taking into account future development levels). However, it is unclear what the impact of the Norton Fitzwarren Bypass, Henlade Bypass, new access and link roads and new park and ride routes is likely to be. Somerset County Council has indicated that little information about the impact of these schemes is available. There is also uncertainty about the level of resources available to implement schemes. The impact has therefore, been scored as uncertain.	?	Mitigation measure: Once more detail is known with relation to the schemes listed in Annex B assessment work should be undertaken to assess the effect of the schemes on congestion and journey times. Annex B should make reference to the scheme appraisal processes that Somerset County Council has in place and should make it clear when and how this process will be undertaken.
	3c: The strategy includes enhanced bus services and this may be positive in terms of sustainable access to rural areas. However, the policy could be clearer on whether better routes to rural areas will be provided. In the absence of these measures, for example, journey times to West Somerset will continue to deteriorate.	?	Mitigation measure: Annex B should be clearer whether better routes to rural areas (for example, West Somerset) will be provided through the policy.
	3d: The pedestrianisation measures in Taunton may reduce the impact of service vehicles on certain areas during the peak period. This would support the aspirations of Project Taunton to reduce vehicle impacts in the town centre whilst maintaining an adequate level of servicing.	+	
Wellington	3a:		
	3b: No modelling has been undertaken on the effect of the policy on journey time, delay etc in Wellington and the effect of the expected new development. It is also unclear what the impact of the new road between Taunton Road and B3187 and the various junction improvements is likely to be. Somerset	?	Mitigation measure: Once more detail is known on the schemes listed in Annex B, assessment work should be undertaken to assess the effect of the

The effect of	of the draft plan on Economy		
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
	County Council has indicated that little information about the impact of these schemes is available. The impact has therefore, been scored as uncertain.		schemes on congestion and journey times. Annex B should make reference to the scheme appraisal processes that Somerset County Council has in place and should make it clear when and how this process will be undertaken.
	3c:		
	3d: The pedestrianisation measures in Wellington could reduce the impact of service vehicles on certain areas during the peak period.	+	
Yeovil highway	3a: The junction improvements will help to improve management of traffic at junctions and reduce traffic delay.	+	
	3b: The junction improvements will help to improve management of traffic at junctions and reduce congestion and journey times.	+	
	3c:		
	3d:		
Yeovil non	3a:		
highway	3b: Bus priority measures should help to decrease bus journey times and the car parking review in association with the public transport improvements may encourage people to switch modes. If this is the case, it will have a positive impact on congestion.	+	
	3c:		
	3d:		
Implementat	tion Stage (assessment of the Draft Implementation Plan and Technical Note	on Transport and	Development)
A draft version	on of the implementation plan has been assessed. The final implementation plan	-	

The effect of the draft plan on Economy			
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
known. The pand that fund this could cau occurs withou produced a d council will ta funding there	halised and the levels of resources available to the County Council are not blan stresses that maintenance of the highway network is likely to be a priority ing for other areas of the transport system is likely to decline. Without mitigation use a significant negative effect in the short term on the economy if development at the necessary transport infrastructure. However, the council have now occument entitled "Transport and Development" and this outlines the steps the ke to ensure that development is planned in a sustainable way. With declines in its still a risk that negative effects may occur, but with the process outlined in the over this will not be a significant negative effect.		

#### **Assessment Conclusions – economy**

#### **Summary of performance:**

The policies in the Somerset County Council Transport Policies document largely perform well against the SEA objectives as they include measures to:

- Manage, maintain and enhance the existing transport system;
- · Reduce traffic volumes and congestion; and
- Manage freight traffic.

All of these measures, when implemented (recognising that the assessment of the Implementation Plan has shown that they are not likely to be implemented in the short term), will help the economy of Somerset. In a similar way to the health and community SEA objectives, many of the policies are likely to interrelate to have a positive cumulative effect on congestion, journey time reliability and therefore, the economy. None of the policies assessed are likely to have a significant positive impact on the economy SEA objectives.

The policies in relation to Taunton, Wellington and Bridgwater will have an uncertain impact on the economy. All of these policies include a list of schemes and little information is available on the likely effect of these schemes on parameters such as congestion and journey time reliability.

The goals are likely to cause a minor negative impact as they do not address access to rural areas and the countryside or management of freight.

As with the other SEA objectives, there is some uncertainty over the implementation of the schemes in the strategies and the Implementation Plan in its current form is likely to have a minor negative effect due to the likely reduction in funding available (it is recognised that the Implementation Plan is a draft and may change once levels of resources are known). The plan stresses that maintenance of the highway network is likely to be a priority and that funding for other areas of the transport system is likely to decline. This is likely to have a negative effect in the short term on the economy if development occurs without

## **Assessment Conclusions – economy**

the necessary transport infrastructure.

## Mitigation and enhancement measures:

## Mitigation measures identified to address potential negative or uncertain effects are as follows:

- If access to rural areas and the countryside is seen as a priority it should be addressed in the goals.
- If freight issues are seen as a priority they should be addressed in the goals.
- Once more detail is known on the schemes listed in Annex B assessment work should be undertaken to assess the effects of the schemes on congestion and journey times. The policies or their supporting text should make reference to the scheme appraisal processes that Somerset County Council has in place and should make it clear when and how this process will be undertaken.
- Annex B should be clearer whether better routes to rural areas (for example, West Somerset) will be provided through the policy.

No enhancement measures have been identified.

# 4 SEA Topic: Accessibility

• Access to services (especially healthcare) in Somerset is poor in many areas for people without a car. Without the measures taken forward as part of the Somerset County Council Transport Policies accessibility levels will decline;

- Travel by **different age groups and social groups** can be very different. The information available on travel by different groups is scarce in Somerset and information is needed to set a baseline before action can be taken:
- **Bus punctuality is improving** but there are problems with bus stop information. According to the Taunton Transport Strategy Review accessibility to public transport is likely to decrease as congestion on the network increases and bus time reliability falls: and
- Somerset has good rail access between the main towns and to areas outside the county and the use of the rail network has increased in
  recent years. It is expected that rail use will continue at the same level or even increase slightly in light of some of the recent infrastructure
  upgrades.

The SEA is assessing the Somerset County Council Transport Policies against the following objectives:

Somerset County Council Transport Policies SEA objective. Will the Transport Policies	Somerset County Council Transport Policies SEA question. Will the Transport Policies
4. Accessibility	
4a: Improve sustainable access to basic services for all groups in society	<ul> <li>Improve provision of public and community transport that makes key services (***) more accessible (link to LAA indicator NI 75 Access to services and facilities by public transport, cycling and walking).</li> <li>Improve access for certain equality groups (race, gender, disability, age, religion and sexual orientation) and contribute to the DfT goal of promoting greater equality</li> </ul>
	of opportunity for all citizens. This includes changes to physical infrastructure and services.

Please note that where it is judged that policies will have no impact on an SEA objective they have been screened out and, therefore, have not been addressed within the assessment matrices.

The effect of the draft plan on Accessibility			
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
Goals	4a: The goals discuss residents being able to reach jobs, shops, schools and medical care easily. The goals also address people having choice and control over their lives, whatever their age, situation and background. This is positive for accessibility and equality.	+	
Policy 1			
Policy 2			
Policy 3	4a: Policy 3 would have a positive impact on improving sustainable accessibility by improving existing community transport.	+	
Policy 4	4a: Policy 4 would have a positive impact in improving the provision of public and community transport by improvement of the integration of rail and bus services at local railway stations, improvements to rural interchanges and through the implementation of bus priority measures. In addition introducing smart card technology to process concessionary passes for the elderly and disabled will help promote greater equality in different groups.	+	
Policy 5	4a: Policy 5 could have a positive impact if increased information were successful in making public transport more accessible. The provision of audio timetabling would have a positive impact on improving access for blind and partial sighted users.	+	
Policy 6	4a: Policy 6 would have a positive impact in improving the provision of public and community transport by improving information across all modes of travel and improving information on integration between modes.	+	
Policy 7	4a: Policy 7 will help to improve access by cycle to key services in market towns in particular.	+	
Policy 8	4a: Policy 8 would have a positive impact on accessibility and equality through ensuring those with reduced mobility and sensory impairments are taken into account when designing pedestrian networks/facilities.	+	

	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
Policy 9	4a: Policy 9 would have a positive impact in improving access for certain groups by improving the safety of walking, the pedestrian environment and the availability of PRoW information and through improving access to visually and mobility impaired people.	+	
Policy 10	4a: Policy 10 would have a positive impact by helping make to rail travel more accessible through initiatives such as promoting the improved consistency of station facilities and research into the need for new services. This will have a positive cumulative effect in association with the Great Western Route Utilisation Strategy which includes several schemes to increase capacity, journey times and services on several of the lines through Somerset.	+	
Policy 11			
Policy 12			
Policy 13			
Policy 14			
Policy 15	4a: Policy 15 could lead to a positive impact in improving sustainable access through ensuring developers promote attractive environments which are accessible and linked with the wider transport network.	+	
Policy 16	4a: Policy 16 could ensure that services are more accessible to people without having to travel.	+	
Policy 17	4a: Policy 17 could lead to a positive impact on the provision of public transport through provision of Park and Ride sites in Yeovil and Bridgwater and through improving access for groups with disabilities by setting standards to ensure developments cater for disabled parking.	+	
Policy 18			

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The effect of the draft plan on Accessibility			
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
Policy 19			
Policy 20	4a: Policy 20 aims to work with local schools and colleges to minimise exclusion from after school learning and activities, which would have a positive impact on promoting greater equality.	+	
Policy 21			
Policy 22	4a: Motorcycles can provide mobility to people who could not afford a car in areas where public transport is poor and so are positive for accessibility. They are particularly positive in improving accessibility for young people and people on low incomes. Measures such as the Moped Loan scheme will be particularly positive.	+	
Policy 23			
Policy 24	4a: Policy 24 would help improve access to health facilities by developing out of hours transport.	+	
Policy 25			
Annex A	4a: A range of measures are given, relating to improvements to the rail network, bus network, cycling and walking routes. In addition, measures relating to accessibility planning are also set out, including access to regional hospitals and major employment sites. These measures are likely to have a positive impact on accessibility and equality.	+	
Annex B: Tau	inton Area and Yeovil Transport Measures		
Area wide initiatives	4a: Annex B could have a positive impact on improving accessibility by improving community transport.	+	
Bridgewater	4a: Several of the measures will help to improve accessibility including enhanced bus links (including more evening and Sunday services), better integration of bus and rail and new park and ride sites. In addition, new or	+	

	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
	improved bus priority will make bus journeys more reliable and will have a positive impact on improving sustainable access to services for all groups.		
Taunton	4a: Several of the measures will help to improve accessibility including enhanced bus, better integration of bus and rail and new or expanded park and ride. In addition, better traffic management, junction improvements and improved bus priority will make bus journeys more reliable and will have a positive impact on improving sustainable access to services for all groups.	+	
Wellington	4a: Several of the measures will help to improve accessibility including a reopened railway station (although this is only a possibility at the moment) and a town bus route. If measures to reduce heavy traffic in town were successful this would also improve bus reliability.	+	
Yeovil highway	4a: The policy would help to reduce the delay experienced by buses. Many bus services use the corridors addressed in the policy.	+	
Yeovil non highway	, , , , , , , , , , , , , , , , , , , ,		
Implementati	on Stage (assessment of the Draft Implementation Plan and Technical Note	on Transport and	Development)
is yet to be fin known. The pand that fundi this could cau of infrastructu have now prosteps the could declines in fur	of the implementation plan has been assessed. The final implementation plan alised and the levels of resources available to the County Council are not plan stresses that maintenance of the highway network is likely to be a priority and for other areas of the transport system is likely to decline. Without mitigation are a significant negative effect in the short term on accessibility in the absence are to support public and community transport services. However, the council duced a document entitled "Transport and Development" and this outlines the incil will take to ensure that development is planned in a sustainable way. With adding there is still a risk that negative effects may occur, but with the process document above this will not be a significant negative effect.	-	

## **Assessment Conclusions – accessibility**

## **Summary of performance:**

The policies in the Somerset County Council Transport Policies document largely perform well against the SEA objectives as they include measures to:

- Improve the provision of public and community transport that will help improve access to key facilities; and
- · Help improve access and facilities for certain groups of people, such as people with disabilities.

All of these measures, when implemented (recognising that the assessment of the Implementation Plan has shown that they are not likely to be implemented in the short term), will help improve accessibility for people in Somerset.

None of the policies assessed are likely to have a significant positive impact on the accessibility SEA Objectives. None of the policies will have an uncertain effect or a minor negative effect on the accessibility SEA Objectives.

As with the other SEA Objectives, there is some uncertainty over the implementation of the schemes in the strategies and the Implementation Plan in its current form is likely to have a negative effect due to the likely reduction in funding available (it is recognised that the Implementation Plan is a draft and may change once levels of resources are known). The plan stresses that maintenance of the highway network is likely to be a priority and that funding for other areas of the transport system is likely to decline (funding could be cut by up to 50%). This will cause a negative effect in the short term on accessibility in the absence of infrastructure to support public and community transport services.

## Mitigation and enhancement measures:

There are no mitigation or enhancement measures suggested.

# **5** SEA Topic: Environment

Sustainability issues identified through the policy review and collection of baseline data include:

• Somerset is a county **rich in biodiversity** from international, national and local sites. Many of these sites and habitats occur next to highways, cycle routes, green lanes or other transport corridors. There have been significant declines in certain habitats and species in past years and much of the South West wildlife is still under threat. Without active management it can be assumed that some habitats and species at least will continue to decline.

- Somerset has a number of **Special Road Verges** which are identified sites within the highways that are of biodiversity interest, usually containing wild flowers of importance, such as orchids.
- A large proportion of Somerset is protected landscape or is rural in character. Transport can affect landscape in a number of ways and transport is having a detrimental effect on a number of countryside character areas.
- Transport planning can contribute to **green infrastructure networks** by enhancing biodiversity interest on rights of way and promoting new rights of way that link areas of green infrastructure. The rights of way network in Somerset is not as easy to use as it could be. Most resources will be targeted at improving the network that exists in the next few years (rather than expanding the network).
- Transport can have negative effects on the townscape and heritage of the settlements it passes through. Most roads in Taunton and Bridgwater and Yeovil will experience increases in traffic thus increasing impact on townscape.

The SEA is assessing the Somerset County Council Transport Policies against the following objectives:

Somerset County Council Transport Policies SEA objective. Will the Transport Policies	Somerset County Council Transport Policies SEA question. Will the Transport Policies
5. Environment	
5a: Protect and enhance biodiversity at all levels	<ul> <li>Cause direct habitat fragmentation / loss especially that would risk achievement of Somerset BAP priority targets?</li> <li>Cause a change in traffic flows or nature of traffic (*) that will affect sensitive habitats or focal species?</li> </ul>
5b: Protect and enhance buildings, sites, areas and features of historic, archaeological and architectural interest	<ul> <li>Cause direct impacts on sites or monuments through the provision of new infrastructure?</li> <li>Cause a change in traffic flows or the nature of traffic (*) that affects townscape,</li> </ul>

Somerset County Council Transport Policies SEA objective. Will the Transport Policies	Somerset County Council Transport Policies SEA question. Will the Transport Policies
	sites and monuments valued for their cultural heritage or changes the number of sites at risk?
5c: Protect and enhance landscape quality and character	Cause changes in traffic flows in areas that are valued for their landscape character?
	<ul> <li>Introduction of new infrastructure to existing areas. This will include new routes, changes to highways signing, lighting and highway furniture such as noise barriers?</li> </ul>

Please note that where it is judged that policies will have no impact on an SEA objective they have been screened out and, therefore, have not been addressed within the assessment matrices.

The effect of	The effect of the draft plan on environment				
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures		
Goals	5a: The goals address protection of the countryside and this should be positive for habitats and therefore species.	+			
	5b: The goals address protection of the countryside but do not address protecting the valued townscapes of Somerset (see also assessment against 2a).	-	Mitigation measure: The living sustainably goal should be extended to address protection of the heritage and townscape of Somerset.		
	5c: The goals address protection of the countryside and this should be positive for the landscape.	+			
Policy 1					
Policy 2					
Policy 3	5a: If Policy 3 is successful in contributing to modal shift from cars to community transport, it could have an indirect positive impact on biodiversity and species through reduction of emissions.	+			

The effect of the draft plan on environment			
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
	5b: If Policy 3 is successful in contributing to modal shift from cars to community transport, it could have an indirect positive impact on protecting and enhancing historic assets through reduction in traffic flows within urban centres.	+	
	5c: If Policy 3 is successful in contributing to modal shift from cars to community transport, it could have an indirect positive impact on protecting and enhancing landscape quality and character, through reduction in traffic flows in rural areas.	+	
Policy 4	5a: If Policy 4 is successful in contributing to modal shift from cars to public transport, it could have an indirect positive impact on biodiversity and species through reduction of emissions.	+	
	5b: If Policy 4 is successful in contributing to modal shift from cars to public transport, it could have an indirect positive impact on protecting and enhancing historic assets through reduction in traffic flows within urban centres.	+	
	5c: If Policy 4 is successful in contributing to modal shift from cars to public transport, it could have an indirect positive impact on protecting and enhancing landscape quality and character, through reduction in traffic flows in rural areas.	+	
Policy 5	5a: If Policy 5 is successful in contributing to modal shift from cars to public transport, it could have an indirect positive impact on biodiversity and species through reduction of emissions.	+	
	5b: If Policy 5 is successful in contributing to modal shift from cars to public transport, it could have an indirect positive impact on protecting and enhancing historic assets through reduction in traffic flows within urban centres.	+	
	5c: If Policy 5 is successful in contributing to modal shift from cars to public	+	

The effect	of the draft plan on environment		
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
	transport, it could have an indirect positive impact on protecting and enhancing landscape quality and character, through reduction in traffic flows in rural areas.		
Policy 6	5a: If Policy 6 is successful in contributing to modal shift from cars to public transport, it could have an indirect positive impact on biodiversity and species through reduction of emissions.	+	
	5b: If Policy 6 is successful in contributing to modal shift from cars to public transport, it could have an indirect positive impact on protecting and enhancing historic assets through reduction in traffic flows within urban centres.	+	
	5c: If Policy 6 is successful in contributing to modal shift from cars to public transport, it could have an indirect positive impact on protecting and enhancing landscape quality and character, through reduction in traffic flows in rural areas.	+	
Policy 7	5a: Policy 7 does not contain any reference to biodiversity. Similarly to Policy 8, Policy 7 could have impacts on Natura 2000 sites. A similar mitigation measure should be included. The supporting text of Policy 13 that refers to loss or disturbance to Natura 2000 sites should be extended to include cycle routes.	+	Enhancement measure: The supporting text of Policy 13 that refers to loss or disturbance to Natura 2000 sites should be extended to include cycle routes.
	5b:		
	5c:		
Policy 8	5a: Policy 8 does not contain any reference to biodiversity, however, the Habitat Regulations Screening Assessment carried out of the Somerset County Council Transport Policies made the recommendation to add an additional measure, which would ensure that any new walking route does not contribute to increases in habitat degradation or loss, or species disturbance on or in areas ecologically supporting Natura 2000 sites. This	+	

The effect of	of the draft plan on environment		
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
	new measure has been added to the supporting text of Policy 13.		
	5b:		
	5c:		
Policy 9	5a: Policy 9 lists actions in relation to Public Rights of Way (PRoW). Of these actions, liaison with Natural England and Farming & Wildlife Advisory Group officers, in particular, would have a positive impact on biodiversity protection and enhancement, ensuring that biodiversity is taken into account when designating or upgrading PRoW.	+	
	5b:		
	5c: Actions such as ensuring that network improvements are secured prior to the sale of any County Farms, improving the PRoW on retained estate farms and enhancing signage and waymarking are likely to have a positive impact on protection and enhancement of the landscape character.	+	
Policy 10	5a: If Policy 10 is successful in contributing to modal shift from cars to public transport, it could have an indirect positive impact on biodiversity and species through reduction of emissions. This will have a positive cumulative effect in association with the Great Western Route Utilisation Strategy which includes several schemes to increase capacity, journey times and services on several of the lines through Somerset.	+	
	5b: If Policy 10 is successful in contributing to modal shift from cars to public transport, it could have an indirect positive impact on protecting and enhancing historic assets through reduction in traffic flows within urban centres. This will have a positive cumulative effect in association with the Great Western Route Utilisation Strategy which includes several schemes to increase capacity, journey times and services on several of the lines through Somerset. The Great Western Route Utilisation Strategy also includes a stakeholder aspiration to reopen a station in Wellington. If the station does	+	

	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
	re-open this could help to reduce commuting traffic to and from Wellington.		
	5c: If Policy 10 is successful in contributing to modal shift from cars to public transport, it could have an indirect positive impact on protecting and enhancing landscape quality and character, through reduction in traffic flows in rural areas. This will have a positive cumulative effect in association with the Great Western Route Utilisation Strategy which includes several schemes to increase capacity, journey times and services on several of the lines through Somerset.	+	
Policy 11	5a: Supporting text to Policy 11 provides a list of measures to support the use of electric vehicles and other sustainable vehicle technologies, such as provision of vehicle charging points, electric sockets in new housing developments, vehicle battery disposal options and support for advancement of biofuels. This could have a positive effect on biodiversity protection and enhancement through reducing vehicle emissions if it results in the use of more sustainable vehicle types. A Habitat Regulations Assessment has been undertaken on the Somerset County Council Transport Policies, and this made the recommendation that the supporting text to this policy should stipulate that, before supporting new technologies, consideration should be given to wildlife species and habitats that are sensitive to changes in land use, and the provisions of the Conservation of Habitats and Species Regulations 2010 should be complied with.	+	Enhancement measure: The Habitat Regulations Screening Assessment made the recommendation that the supporting text to Policy 11 (previously Policy 17) should stipulate that, before supporting new technologies, consideration should be given to wildlife species and habitats that are sensitive to changes in land use, and the provisions of the Conservation of Habitats and Species Regulations 2010 should be complied with.
	5b:		
	5c:		
Policy 12			
Policy 13	5a: The policy will be very positive for biodiversity as it aims to integrate biodiversity concerns into transport planning in Somerset. Examples include the provision of species and habitat action plans and actions to protect Natura 2000 sites.	+	

The effect of the draft plan on environment			
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
	5a: The policy will be very positive for heritage and townscape as it aims to integrate environmental concerns into transport planning in Somerset. Examples include considering the impacts of work on the local urban environment.	+	
	5c: The policy will be very positive for landscape as it aims to integrate landscape concerns into transport planning in Somerset. Examples include considering landscape character in the preparation of schemes and maintenance.	+	
Policy 14	5a: If the policy is successful in reducing congestion and traffic it will be positive for biodiversity.	+	
	5b: If the policy is successful in reducing congestion and traffic it will be positive for heritage.	+	
	5c: If the policy is successful in reducing congestion and traffic it will be positive for landscape.	+	
Policy 15	5a: If Policy 15 is successful in contributing to modal shift from cars to public transport, it could have an indirect positive impact on biodiversity and species through reduction of emissions.	+	
	5b: If Policy 15 is successful in contributing to modal shift from cars to public transport, it could have an indirect positive impact on protecting and enhancing historic assets through reduction in traffic flows within urban centres.	+	
	5c: If Policy 15 is successful in contributing to modal shift from cars to public transport, it could have an indirect positive impact on protecting and enhancing landscape quality and character, through reduction in traffic flows in rural areas.	+	
Policy 16			

		0::	One and a last direction and l
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
Policy 17	5a: Policy 17 sets out the strategy for parking management, which includes provision of Park & Ride sites in Taunton, Yeovil and Bridgewater. These may have an adverse impact on biodiversity through loss of habitat. However, the exact locations of these sites are unknown and it is assumed that this type of development will require EIA through the planning process. Therefore, it is appropriate to address this at the more detailed planning level.	?	Mitigation measure: Under Policy 17 further assessment work is needed on the new park and ride sites before development goes ahead and appropriate mitigation measures need to be put in place if needed. Policy 17 or its supporting text should make reference to the scheme appraisal processes that Somerset County Council has in place and should make it clear when and how this process will be undertaken.
	5b: Policy 17 sets out the strategy for parking management, which includes provision of Park & Ride sites in Taunton, Yeovil and Bridgewater. These may have an adverse impact on heritage, however, the exact locations of these sites are unknown and it is assumed that this type of development will require EIA through the planning process. Therefore, it is appropriate to address this at the more detailed planning level.	?	Mitigation measure: Under Policy 17, further assessment work is needed on the new park and ride sites before development goes ahead and appropriate mitigation measures need to be put in place if needed. Policy 17 or its supporting text should make reference to the scheme appraisal processes that Somerset County Council has in place and should make it clear when and how this process will be undertaken.
	5c: Policy 17 sets out the strategy for parking management, which includes provision of Park & Ride sites in Taunton, Yeovil and Bridgewater. These may have an adverse impact on landscape. However, the exact locations of these sites are unknown and it is assumed that this type of development will require EIA through the planning process. Therefore, it is appropriate to address this at the more detailed planning level.	?	Mitigation measure: Under Policy 17, further assessment work is needed on the new park and ride sites before development goes ahead and appropriate mitigation measures need to be put in place if needed. Policy 17 or its supporting text should make reference to the scheme appraisal processes that

	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
			Somerset County Council has in place and should make it clear when and how this process will be undertaken.
Policy 18	5a: The main impact that the packages are likely to have is through changes to HGV routes (routing HGVs away from sensitive routes or changes that bring HGVs onto more sensitive routes). The Traffic Regulations Orders in particular may pose the risk of moving HGV traffic to more sensitive area in terms of environmental impact. If Traffic Regulation Orders are taken forward their routing should be carefully planned and monitored to ensure that they do not move HGV traffic onto more sensitive routes in terms of biodiversity.	-	Mitigation measure: If Traffic Regulation Orders are taken forward under Policy 18 their routing should be carefully planned and monitored to ensure that they do not move HGV traffic onto more sensitive routes in terms of biodiversity. The policy or its supporting text should commit to this.
	5b: The main impact that the packages are likely to have is through changes to HGV routes (routing HGVs away from sensitive routes or changes that bring HGVs onto more sensitive routes). The Traffic Regulations Orders in particular may pose the risk of moving HGV traffic to more sensitive area in terms of environmental impact. If Traffic Regulation Orders are taken forward their routing should be carefully planned and monitored to ensure that they do not move HGV traffic onto more sensitive routes in terms of heritage.	-	Mitigation measure: If Traffic Regulation Orders are taken forward under Policy 18 their routing should be carefully planned and monitored to ensure that they do not move HGV traffic onto more sensitive routes in terms of heritage. The policy or its supporting text should commit to this.
	5c: The main impact that the packages are likely to have is through changes to HGV routes (routing HGVs away from sensitive routes or changes that bring HGVs onto more sensitive routes). The Traffic Regulations Orders in particular may pose the risk of moving HGV traffic to more sensitive area in terms of environmental impact. If Traffic Regulation Orders are taken forward their routing should be carefully planned and monitored to ensure that they do not move HGV traffic onto more sensitive routes in terms of landscape.	-	Mitigation measure: If Traffic Regulation Orders are taken forward under Policy 18 their routing should be carefully planned and monitored to ensure that they do not move HGV traffic onto more sensitive routes in terms of landscape. The policy or its supporting text should commit to this.

The effect of	The effect of the draft plan on environment				
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures		
Policy 20	5a: If Policy 20 is successful in contributing to modal shift from cars to public transport, it could have an indirect positive impact on biodiversity and species through reduction of emissions.	+			
	5b: If Policy 20 is successful in contributing to modal shift from cars to public transport, it could have an indirect positive impact on protecting and enhancing historic assets through reduction in traffic flows within urban centres.	+			
	5c: If Policy 20 is successful in contributing to modal shift from cars to public transport, it could have an indirect positive impact on protecting and enhancing landscape quality and character, through reduction in traffic flows in rural areas.	+			
Policy 21	5a: Policy 21 highlights the fact that a Somerset Drivers Centre forms a key part of the road safety strategy. The development of such a centre may have an impact on biodiversity but this is a long term aspiration and there is currently uncertainty over the site that is likely to be chosen (and the project is currently on hold).	?	Mitigation measure: Environmental factors and issues should be included within the site selection of the Drivers Centre under Policy 21 if it goes ahead.		
	5b: Policy 21 highlights the fact that a Somerset Drivers Centre forms a key part of the road safety strategy. The development of such a centre may have an impact on heritage but this is a long term aspiration and there is currently uncertainty over the site that is likely to be chosen (and the project is currently on hold).	?	Mitigation measure: Environmental factors and issues should be included within the site selection of the Drivers Centre under Policy 21 if it goes ahead.		
	5c: Policy 21 highlights the fact that a Somerset Drivers Centre forms a key part of the road safety strategy. The development of such a centre may have an impact on landscape but this is a long term aspiration and there is currently uncertainty over the site that is likely to be chosen (and the project is currently on hold).	?	Mitigation measure: Environmental factors and issues should be included within the site selection of the Drivers Centre under Policy 21 if it goes ahead.		
Policy 22					

The effect of	f the draft plan on environment		
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
Policy 23			
Policy 24			
Policy 25			
Annex A	5a: A range of measures are given, relating to improvements to the rail network, bus network, freight routes, cycling and walking routes. If successful in promoting modal shift, these measures would have an indirect positive impact on biodiversity and species through reduction of emissions.	+	
	5b: Annex A lists the cross-boundary transport issues and aspirations for Somerset. A range of measures are given, relating to improvements to the rail network, bus network, freight routes, cycling and walking routes. If successful in promoting modal shift, these measures would have an indirect positive impact on protecting and enhancing historic assets through reduction in traffic flows within urban centres.	+	
	5c: Annex A lists the cross-boundary transport issues and aspirations for Somerset. A range of measures are given, relating to improvements to the rail network, bus network, freight routes, cycling and walking routes. If successful in promoting modal shift, these measures would have an indirect positive impact on protecting and enhancing landscape quality and character, through reduction in traffic flows in rural areas.	+	
Annex B: Ta	unton Area and Yeovil Transport Measures		
Area wide initiatives			
Bridgwater	5a: The changes in traffic levels in association with the new development expected in the town will mainly affect routes in town centres or strategic routes so there will be no significant effect on habitats and species of value due to changes in traffic levels. Some of the schemes identified in the policy	-	Mitigation measure: Further assessment work is needed on the impact of the North Petherton bypass, proposed parliand ride site and access road before

Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
may cause negative impacts on biodiversity. The new road adjacent to the M5 and the potential park and ride site may also cause issues in relation to various protected species and habitats and may also have cumulative impacts in association with development at North East Bridgwater and the hospital site.		development goes ahead and appropriate mitigation measures need to be put in place. Annex B should make reference to the scheme appraisal processes that Somerset County Council has in place and should make it clear when and how this process will be undertaken.
5b: Traffic calming measures and pedestrian priority should have a positive effect on townscape within Bridgwater. There could be some negative impacts on features of historic interest from the North Petherton bypass, park and bus site and new road adjacent to the M5. However, no details are available on these schemes or their locations so the impact has been scored as uncertain.	?	Mitigation measure: Further assessment work is needed on the impact of the North Petherton bypass, proposed park and ride site and access road before development goes ahead and appropriate mitigation measures need to be put in place. Annex B should make reference to the scheme appraisal processes that Somerset County Council has in place and should make it clear when and how this process will be undertaken.
5c: There could be some negative impacts on local landscape character from the North Petherton bypass, park and bus site and new road adjacent to the M5. However, no details are available on these schemes or their locations so the impact has been scored as uncertain.	?	Mitigation measure: Further assessment work is needed on the impact of the North Petherton bypass, proposed park and ride site and access road before development goes ahead and appropriate mitigation measures need to be put in place. Annex B should make reference to the scheme appraisal processes that Somerset County Council has in place and should make it clear when and how this process will be

	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
			undertaken.
Taunton	5a: The changes in traffic levels in association with the new development expected in the town will mainly affect routes in town centres or strategic routes so there will be no significant effect on habitats and species of value due to changes in traffic levels. Some of the schemes identified in the policy may cause negative impacts on biodiversity including on Hestercombe House SAC and Annex B recognises this and states that any proposal would have to ensure that there is no adverse effect on the maintenance of the population of lesser horseshoe bats in order to comply with the Habitats Regulations. The location of new park and ride sites is unspecified and their impact is therefore unknown.	?	Mitigation measure: Further assessment work is needed on all the schemes before development goes ahead and appropriate mitigation measures need to be put in place. Annex B should make reference to the scheme appraisal processes that Somerset County Councillo has in place and should make it clear when and how this process will be undertaken.
	5b: Increased pedestrianisation should have a positive effect on townscape within Taunton. There could be some negative impacts on features of historic interest from the North Fitzwarren and Henlade bypass and the new park and ride site. However, no details are available on these schemes or their locations so the impact has been scored as uncertain.	?	Mitigation measure: Further assessment work is needed on all the schemes before development goes ahead and appropriate mitigation measures need to be put in place. Annex B should make reference to the scheme appraisal processes that Somerset County Counci has in place and should make it clear when and how this process will be undertaken.
	5c: There could be some negative impacts on local landscape character from the North Fitzwarren and Henlade bypass and the new park and ride site. However, no details are available on these schemes or their locations so the impact has been scored as uncertain.	?	Mitigation measure: Further assessment work is needed on all the schemes before development goes ahead and appropriate mitigation measures need to be put in place. Annex B should make reference to the scheme appraisal processes that Somerset County Counci has in place and should make it clear when and how this process will be

	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
			undertaken.
Wellington	5a: The changes in traffic levels in association with the new development expected in the town will mainly affect routes in town centres or strategic routes so there will be no significant effect on habitats and species of value due to changes in traffic levels. The new road between Taunton Road and B3187 may cause negative impacts on biodiversity including on Hestercombe House SAC. Annex B recognises this and states that any proposal would have to ensure that there is no adverse effect on the maintenance of the population of lesser horseshoe bats in order to comply with the Habitats Regulations. Despite this, there is still the potential for some impacts on biodiversity so this has been scored as minor negative.	-	Mitigation measure: Further assessment work is needed on all the schemes before development goes ahead and appropriate mitigation measures need to be put in place. Annex B should make reference to the scheme appraisal processes that Somerset County Counc has in place and should make it clear when and how this process will be undertaken.
	5b: Increased pedestrianisation and the development of the new road should have a positive effect on townscape within Wellington. There could be some negative impacts on features of historic interest from the new road between Taunton Road and the B3187. However, no details are available on this scheme so the impact has been scored as uncertain.	?	Mitigation measure: Further assessment work is needed on all the schemes before development goes ahead and appropriate mitigation measures need to be put in place. Annex B should make reference to the scheme appraisal processes that Somerset County Counci has in place and should make it clear when and how this process will be undertaken.
	5c: There could be some negative impacts on local landscape character from the new road between Taunton Road and the B3187. However, no details are available on this scheme so the impact has been scored as uncertain.	?	Mitigation measure: Further assessment work is needed on all the schemes before development goes ahead and appropriate mitigation measures need to be put in place. Annex B should make reference to the scheme appraisal processes that Somerset County Counci has in place and should make it clear when and how this process will be

The effect of	The effect of the draft plan on environment				
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures		
			undertaken.		
Yeovil highway					
Yeovil non highway					
Implementation	Implementation Stage (assessment of the Draft Implementation Plan and Technical Note on Transport and Development)				
A draft version of the implementation plan has been assessed. The final implementation plan is yet to be finalised and the levels of resources available to the County Council are not known. The plan stresses that maintenance of the highway network is likely to be a priority and that funding for other areas of the transport system is likely to decline. The effect of this is that the schemes highlighted above are unlikely to be implemented in the short term. This could mean that some negative environmental effects are avoided in the short term but also means that schemes to reduce the negative impacts of traffic on townscape are not taken forward. In the absence of information on the likely timescales for schemes the impact has been scored as uncertain.		?			

#### Assessment Conclusions – Environment

#### **Summary of performance:**

The policies in the Somerset County Council Transport Policies document largely perform well against the SEA objectives as they include measures that will help reduce the impact of transport on the environment. The policies contained within the plan should help to provide alternative modes of transport and manage traffic to reduce the impact on communities and townscape and reduce congestion and traffic. All of these measures should help to reduce the impact of traffic on biodiversity and heritage and improve landscapes and townscapes. All of these measures, when implemented (recognising that the assessment of the Implementation Plan has shown that they are not likely to be implemented in the short term), will help improve the environment of Somerset. There are a number of impact-interactions between the environmental SEA objectives and the other SEA objectives. For example, there is a clear inter-relationship between air quality and biodiversity. A positive impact on air quality (as highlighted in the health section above) could have an indirect and cumulative effect on biodiversity as improved air quality can help to reverse the degradation of some habitats. There is also a clear inter-relationship between effects on urban and rural centres and heritage/townscape. If traffic management measures are put in place to improve the quality of centres this is likely to have a positive impact on heritage (as many of Somerset's towns and villages have historic cores). None of the policies assessed are likely to have a significant positive impact on the environment SEA Objectives.

Several policies are likely to have an uncertain impact. This includes the effects of the Taunton, Bridgwater and Wellington schemes in Annex B on heritage and landscape. The Council has indicated that there are no details available on these schemes and their locations so the impact has been scored as uncertain. The Implementation Plan could also have an uncertain effect as it is highlighting potential significant funding cuts. The effect of this is that the schemes highlighted above are unlikely to be implemented in the short term. This could mean that some negative environmental effects are avoided in the short term but also means that schemes to reduce the negative impacts of traffic on townscape are not taken forward. In the absence of information on the likely timescales for schemes the impact has been scored as uncertain.

Several aspects of the plan are likely to cause a minor negative impact. This includes the goal on living sustainability as it excludes reference to townscapes. The only policy that will have a minor negative effect is the policy on freight management. This is because Traffic Regulation Orders pose the risk of moving HGV traffic to more sensitive areas in terms of environmental impact.

## Mitigation and enhancement measures:

## Mitigation measures identified to address potential negative or uncertain effects are as follows:

- The living sustainably goal should be extended to address protection of the heritage and townscape of Somerset.
- Under Annex B, further environmental assessment work is needed on all the schemes before development goes ahead and appropriate mitigation measures need to be put in place. Annex B should make reference to the scheme appraisal processes that Somerset County Council has in place and should make it clear when and how this process will be undertaken.
- If Traffic Regulation Orders are taken forward under Policy 18 their routing should be carefully planned and monitored to ensure that they do not move HGV traffic onto more sensitive routes in terms of biodiversity, heritage and landscape. The policy or its supporting text should commit to this.
- Environmental factors and issues should form a consideration in the site selection of the Drivers Centre under Policy 21 and the policy or supporting text

## **Assessment Conclusions – Environment**

should commit to this.

## Enhancement measures identified in order to improve the performance of the plan are as follows:

- The supporting text of Policy 13 that refers to loss or disturbance to Natura 2000 sites should be extended to include cycle routes.
- The Habitat Regulations Screening Assessment made the recommendation that the supporting text to Policy 11 (previously Policy 17) should stipulate that, before supporting new technologies, consideration should be given to wildlife species and habitats that are sensitive to changes in land use, and the provisions of the Conservation of Habitats and Species Regulations 2010 should be complied with.

# 6 SEA Topic: Natural Resources

• There is **no data available on the amount of renewable energy** used in the transport system in Somerset. The target is 10% of the total energy use in transport systems to be derived from renewable sources;

- Somerset's cars **emit more CO<sub>2</sub> than in other areas** because of the rural nature of the county and the average age of the fleet. Road transport emits a higher amount of CO<sub>2</sub> in Sedgemoor, South Somerset and Taunton Deane. This is likely to be due to the rural nature of South Somerset and the influence of the M5 in Sedgemoor and Taunton Deane;
- The county is likely to experience a number of changes due to climate change such as warmer wetter winters, more stormy weather and hotter summers. This will have numerous effects on the transport system;
- Water consumption per head is higher in Somerset than in the UK as a whole. This is an important issue in terms of maintenance;
- There has been deterioration in groundwater quality in the Wessex Water region. Transport can also have impacts on sensitive watercourses and soil if drainage is not adequate;
- Use of recycled aggregates Somerset re-uses a high proportion of road planings and this should continue; and
- Transport of minerals and waste by road can cause problems to local communities.

The SEA is assessing the Somerset County Council Transport Policies against the following objectives:

Somerset County Council Transport Policies SEA objective. Will the Transport Policies	Somerset County Council Transport Policies SEA question. Will the Transport Policies
6. Natural resources	
6a: Reduce the contribution of the transport system to carbon emissions	<ul> <li>Cause a change in vehicle miles or a change in the nature of traffic (*) that would cause changes in fuel use and CO<sub>2</sub> that would assist in meeting the SCS target of reducing the amount of carbon dioxide produced per person in Somerset (link to LAA indicator NI 185: CO<sub>2</sub> reduction from Local Authority operations; NI 186: per capita CO<sub>2</sub> emissions in the Local Authority area)</li> <li>Increase the use of energy from renewable sources in the transport system (to reach a target of 10% of the total energy consumed)</li> </ul>
6b: Ensure that the transport system can cope with the unavoidable effects of climate change	Reduce the unavoidable effects of climate change (link to LAA indicator NI 188: Adapting to climate change)

Somerset County Council Transport Policies SEA objective. Will the Transport Policies	Somerset County Council Transport Policies SEA question. Will the Transport Policies			
6c: Minimise the impact of the transport system on water resources, soil and mineral resources	<ul> <li>Cause an improvement in water quality that could help to meet the WFD target of achievement of good ecological status of water bodies by 2015?</li> </ul>			
	Cause changes to maintenance regimes that may decrease the need for water or decrease the potential for flooding?			
	Reduce the demand for aggregate?			
	Help to protect loss or pollution of soils which support valued habitats or are already experiencing erosion?			

Please note that where it is judged that policies will have no impact on an SEA objective they have been screened out and, therefore, have not been addressed within the assessment matrices.

The effect	The effect of the draft plan on natural resources				
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures		
Goals	6a: The goals address encouraging more sustainable modes of transport and helping communities to travel less and if these are effective in getting people to use their cars less it will be positive in terms of carbon emissions.	+			
	6b: The goals address the importance of everyone being aware of the impact of climate change on the county and of the importance of managing its effects. This should be positive for ensuring the county adapts to climate change.	+			
	6c: The goals do not address pollution directly but do address encouraging more sustainable modes of transport and helping communities to travel less. If this helps to reduce traffic the pollution from traffic will be reduced.	+			
Policy 1					
Policy 2	Publishing an annual Climate Change Action Plan to deal with the causes of climate change should lead to a reduction of carbon emissions.	+	Enhancement measure: It would be useful if the final action plan stated how		

The effect	of the draft plan on natural resources		
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
			the Council could work towards climate change targets through the funding available in the short term and the schemes likely to be implemented.
	Publishing an annual Climate Change Action Plan to deal with the effects of climate change should help ensure that the transport system can cope with the effects of climate change.	+	
	6c:		
Policy 3	6a: Policy 3 could lead to a positive impact in reducing carbon emissions if it were successful in contributing to modal shift from private car to community transport.	+	
	6b:		
	6c:		
Policy 4	6a: Policy 4 could lead to a positive impact in the reduction of carbon emissions if the strategy for improving bus and community transport were successful in contributing to modal shift from private car to bus and community transport.	+	
	6b: Increases in temperature and rainfall at certain times of the year (under climate change scenarios) may make people less willing to use the bus. The effect of the policy on this issue is uncertain as the issue is not addressed.	?	Mitigation measure: It would be useful if Policy 4 discussed climate change adaptation and integrated climate issues into work undertaken to improve bus stops and interchanges – ensuring that shade is available at as many bus stops as possible, for example.
	6c:		
Policy 5	6a: Policy 5 could lead to a positive impact in the reduction of carbon	+	

The effect of	of the draft plan on natural resources		
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
	emissions by improving the range of local bus information available and thus encouraging people to shift from private car to bus. This policy deals with the type of bus information available to the public and the way in which the bus information should be made available and provides methods for the information on existing bus services to adapt to new technologies.		
	6b:		
	6c:		
Policy 6	6a: Policy 6 could lead to a positive impact in the reduction of carbon emissions if it were successful in contributing to modal shift away from private car and reducing congestion. This should be particularly successful, as research has indicated that people can't always find the travel information that they need within the county.	+	
	6b:		
	6c:		
Policy 7	6a:		
	6b: Under climate change forecasts weather may get hotter and also wetter at certain times of the year and this may discourage people from cycling. The issue is not addressed in the policy so the effect has been scored as uncertain.	?	Mitigation measure: It would be useful if Policy 7 integrated climate issues into cycling standards. Examples of measures include shaded walk ways, avoiding areas at risk from flooding, use of materials which don't contribute to surface water runoff etc.
	6c:		
Policy 8	6a:		
	6b: Under climate change forecasts weather may get hotter and also wetter at	?	Mitigation measure: It would be useful if

	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
	certain times of the year and this may discourage people from walking. The issue is not addressed in the policy so the effect has been scored as uncertain.	the effect	Policy 8 integrated climate issues into pedestrian standards. Examples of measures include shaded walk ways, avoiding areas at risk from flooding, use of materials which don't contribute to surface water runoff etc.
	6c:		
Policy 9			
Policy 10	6a: Policy 10 could lead to a positive impact in the reduction of carbon emissions by encouraging modal shift from private car to rail through initiatives such as promoting the improved consistency of station facilities and research into the need for new services. This will have a positive cumulative effect in association with the Great Western Route Utilisation Strategy which includes several schemes to increase capacity, journey times and services on several of the lines through Somerset.	+	
	6b:		
	6c:		
Policy 11	6a: Policy 11 could lead to a positive impact in the reduction of carbon emissions by encouraging modal shift from private car to new technologies such as electric vehicles through initiatives such as supporting the provision of electric vehicle charging points at locations and encouraging developers to install electric sockets in new developments.	+	
	6b:		
	6c:		
Policy 12			

Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)   Significance of the effect	
6b: The policy will be positive as it seeks to ensure that work does not create an additional risk of flooding and, where possible, measures can be implemented to help reduce the risk of flooding in the future.  Policy 14  6a: If the policy is successful in reducing congestion and traffic it will be positive for carbon emissions.  Policy 15  6a: Policy 15 should be positive in reducing carbon emissions as it seeks to put in place measures to reduce car travel from new developments.  6b: The supporting text to Policy 15 states that developers should take account of climate change in the layout of developments.  6c:  Policy 16  Policy 17  6a: Policy 17 could lead to a positive impact in the reduction of carbon emissions through modal shift achieved by the implementation of Park and Ride schemes that help reduce congestion and by providing parking facilities for cyclists, by promoting active travel etc. It is unclear from this policy the implication of providing parking levels that depart from the standards as, if	Suggested mitigation and enhancement measures
an additional risk of flooding and, where possible, measures can be implemented to help reduce the risk of flooding in the future.  Policy 14  6a: If the policy is successful in reducing congestion and traffic it will be positive for carbon emissions.  Policy 15  6a: Policy 15 should be positive in reducing carbon emissions as it seeks to put in place measures to reduce car travel from new developments.  6b: The supporting text to Policy 15 states that developers should take account of climate change in the layout of developments.  6c:  Policy 16  Policy 17  6a: Policy 17 could lead to a positive impact in the reduction of carbon emissions through modal shift achieved by the implementation of Park and Ride schemes that help reduce congestion and by providing parking facilities for cyclists, by promoting active travel etc. It is unclear from this policy the implication of providing parking levels that depart from the standards as, if	
Policy 15  6a: Policy 15 should be positive in reducing carbon emissions as it seeks to put in place measures to reduce car travel from new developments.  6b: The supporting text to Policy 15 states that developers should take account of climate change in the layout of developments.  6c:  Policy 16  Policy 17  6a: Policy 17 could lead to a positive impact in the reduction of carbon emissions through modal shift achieved by the implementation of Park and Ride schemes that help reduce congestion and by providing parking facilities for cyclists, by promoting active travel etc. It is unclear from this policy the implication of providing parking levels that depart from the standards as, if	
Policy 15  6a: Policy 15 should be positive in reducing carbon emissions as it seeks to put in place measures to reduce car travel from new developments.  6b: The supporting text to Policy 15 states that developers should take account of climate change in the layout of developments.  6c:  Policy 16  Policy 17  6a: Policy 17 could lead to a positive impact in the reduction of carbon emissions through modal shift achieved by the implementation of Park and Ride schemes that help reduce congestion and by providing parking facilities for cyclists, by promoting active travel etc. It is unclear from this policy the implication of providing parking levels that depart from the standards as, if	
put in place measures to reduce car travel from new developments.  6b: The supporting text to Policy 15 states that developers should take account of climate change in the layout of developments.  6c:  Policy 16  Policy 17  6a: Policy 17 could lead to a positive impact in the reduction of carbon emissions through modal shift achieved by the implementation of Park and Ride schemes that help reduce congestion and by providing parking facilities for cyclists, by promoting active travel etc. It is unclear from this policy the implication of providing parking levels that depart from the standards as, if	
put in place measures to reduce car travel from new developments.  6b: The supporting text to Policy 15 states that developers should take account of climate change in the layout of developments.  6c:  Policy 16  Policy 17  6a: Policy 17 could lead to a positive impact in the reduction of carbon emissions through modal shift achieved by the implementation of Park and Ride schemes that help reduce congestion and by providing parking facilities for cyclists, by promoting active travel etc. It is unclear from this policy the implication of providing parking levels that depart from the standards as, if	
account of climate change in the layout of developments.  6c:  Policy 16  Policy 17  6a: Policy 17 could lead to a positive impact in the reduction of carbon emissions through modal shift achieved by the implementation of Park and Ride schemes that help reduce congestion and by providing parking facilities for cyclists, by promoting active travel etc. It is unclear from this policy the implication of providing parking levels that depart from the standards as, if	
Policy 16  Policy 17  6a: Policy 17 could lead to a positive impact in the reduction of carbon emissions through modal shift achieved by the implementation of Park and Ride schemes that help reduce congestion and by providing parking facilities for cyclists, by promoting active travel etc. It is unclear from this policy the implication of providing parking levels that depart from the standards as, if	
Policy 17  6a: Policy 17 could lead to a positive impact in the reduction of carbon emissions through modal shift achieved by the implementation of Park and Ride schemes that help reduce congestion and by providing parking facilities for cyclists, by promoting active travel etc. It is unclear from this policy the implication of providing parking levels that depart from the standards as, if	
emissions through modal shift achieved by the implementation of Park and Ride schemes that help reduce congestion and by providing parking facilities for cyclists, by promoting active travel etc. It is unclear from this policy the implication of providing parking levels that depart from the standards as, if	
of private cars use may remain the same or increase.	Mitigation measure: Policy 17 should make it clear what is meant by departure from the parking standards and whether this means that more parking would be sanctioned for certain sites.
6b:	

The effect	of the draft plan on natural resources		
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
	6c:		
Policy 18	6a: In order to have a positive effect on carbon emissions, the policy would need to cause a significant change in vehicle miles. The main impact on vehicle miles is likely to come from developing Traffic Regulation Orders. These orders are likely to lengthen routes that HGVs have to take and so increase carbon emissions. If Traffic Regulation Orders are taken forward their routing should be carefully planned and monitored to ensure that they do not increase the level of carbon emissions unacceptably.	+	Mitigation measure: If Traffic Regulation Orders are taken forward as part of Policy 18 their routing should be carefully planned and monitored to ensure that they do not increase the level of carbon emissions unacceptably. The policy or its supporting text should commit to this.
	6b:		
	6c:		
Policy 19	6a:		
	6b: Policy 19 will help ensure the condition of assets will be regularly monitored and improvements are made to improve the standard of the transport asset. This should help ensure that the transport system can cope with the effects of climate change. The policy supporting text also states that maintenance will be prioritised based on the community's objectives. It is assumed that one of these objectives is to reduce the effects of climate change. However, these objectives are not set out.	+	Enhancement measure: Policy 19 should outline what the community objectives are or are likely to be in different locations. It is suggested that these objectives should include reducing the unavoidable effects of climate change.
	6c: The policy could be positive in reducing the impact on minerals resources if good quality materials are used. However, it would be more positive if the policy specified the use of the most sustainable aggregate.	+	Enhancement measure: Policy 19 would be more positive if it included consideration of responsible sourcing and sustainability of material
Policy 20	6a: Policy 20 could lead to a positive impact on carbon emissions reductions through initiatives to encourage modal shift away from private car and measures to reduce congestion such as improve integration of school travel planning and the provision of school transport.	+	

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The effect	of the draft plan on natural resources		
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
	6b:		
	6c:		
Policy 21			
Policy 22	6a: Motorcycles represent a more efficient use of resources than the private car in terms of both their fuel efficiency and manufacture and the smaller and newer machines produce lower CO <sub>2</sub> emissions than most cars. It will be important that the Council promotes the safe and responsible use of smaller machines (as bigger machines have little pollution benefit over cars). The plan does discuss a Moped Loan Scheme that will help to achieve this but if other measures can be included to promote smaller machines they should be included in the policy.	+	Enhancement measure: If other measures can be included in the plan (apart from a Moped Loan Scheme) to promote smaller powered two wheelers they should be included in Policy 22.
	6b:		
	6c:		
Policy 23			
Policy 24			
Policy 25			
Annex A	6a: A range of measures are given, relating to improvements to the rail network, bus network, freight routes, cycling and walking routes. If successful in promoting modal shift, these measures would have a positive impact on reducing carbon emissions through reduction in traffic flows within urban centres	+	
	6b:		
	6c:		

The effect of	of the draft plan on natural resources		
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
Annex B: Ta	unton Area and Yeovil Transport Measures		
Area wide initiatives	6a: Annex B could lead to a positive impact in the reduction of carbon emissions through the promotion of electric vehicles and by reducing congestion through the management of traffic to make better use of the road network.	+	
	6b:		
	6c:		
Bridgwater	6a: The change in $CO_2$ emissions resulting from future development and the traffic this causes is not known from the measures outlined for Bridgwater. The effect has been assessed as uncertain (although $CO_2$ emissions are likely to rise).	?	Mitigation measure: Further environmental assessment work is needed on all the schemes in Annex B before development goes ahead and appropriate mitigation measures need to be put in place. This work should address the effects of the schemes on carbon emissions. Annex B should make reference to the scheme appraisal processes that Somerset County Counci has in place and should make it clear when and how this process will be undertaken.
	6b:		
	6c: The effects of the listed schemes in the policy on water resources, soils and minerals are unknown. However, any new infrastructure is likely to require aggregates and could potentially cause water and soil pollution.	?	Mitigation measure: Further environmental assessment work is needed on all the schemes in Annex B before development goes ahead and appropriate mitigation measures need to be put in place. This work should address the effects of the schemes on

The effect of the draft plan on natural resources			
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
			water, soil and minerals. Annex B should make reference to the scheme appraisal processes that Somerset County Council has in place and should make it clear when and how this process will be undertaken.
Taunton	6a: The change in $CO_2$ emissions resulting from future development and the traffic this causes is not known from the measures outlined for Taunton. The effect has been assessed as uncertain (although $CO_2$ emissions are likely to rise).	?	Mitigation measure: Further environmental assessment work is needed on all the schemes in Annex B before development goes ahead and appropriate mitigation measures need to be put in place. This work should address the effects of the schemes on carbon emissions. Annex B should make reference to the scheme appraisal processes that Somerset County Council has in place and should make it clear when and how this process will be undertaken.
	6b:		
	6c: The effects of the listed schemes in the policy on water resources, soils and minerals are unknown. However, any new infrastructure is likely to require aggregates and could potentially cause water and soil pollution.	?	Mitigation measure: Further environmental assessment work is needed on all the schemes in Annex B before development goes ahead and appropriate mitigation measures need to be put in place. This work should address the effects of the schemes on water, soil and minerals. Annex B should make reference to the scheme appraisal processes that Somerset

	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
			County Council has in place and should make it clear when and how this process will be undertaken.
Wellington	6a: The change in $CO_2$ emissions resulting from future development and the traffic this causes is not known from the measures outlined for Wellington. The effect has been assessed as uncertain (although $CO_2$ emissions are likely to rise).	?	Mitigation measure: Further environmental assessment work is needed on all the schemes in Annex B before development goes ahead and appropriate mitigation measures need to be put in place. This work should address the effects of the schemes on carbon emissions. Annex B should make reference to the scheme appraisal processes that Somerset County Council has in place and should make it clear when and how this process will be undertaken.
	6b:		
	6c: The effects of the listed schemes in the policy on water resources, soils and minerals are unknown. However, any new infrastructure is likely to require aggregates and could potentially cause water and soil pollution.	?	Mitigation measure: Further environmental assessment work is needed on all the schemes in Annex B before development goes ahead and appropriate mitigation measures need to be put in place. This work should address the effects of the schemes on water, soil and minerals. Annex B should make reference to the scheme appraisal processes that Somerset County Council has in place and should make it clear when and how this process will be undertaken.

The effect of the draft plan on natural resources			
	Impact of the option (including if appropriate nature and spatial extent of the impact, probability, duration, frequency and reversibility)	Significance of the effect	Suggested mitigation and enhancement measures
Yeovil highway			
Yeovil non highway	6a: The change in CO <sub>2</sub> emissions is not known from the measures outlined for Yeovil. The effect has been assessed as uncertain.	?	Mitigation measure: Further environmental assessment work is needed on all the schemes in Annex B before development goes ahead and appropriate mitigation measures need to be put in place. This work should address the effects of the schemes on carbon emissions. Annex B should make reference to the scheme appraisal processes that Somerset County Council has in place and should make it clear when and how this process will be undertaken.
	6b:		
	6c: The effects of the listed schemes in the policy on water resources, soils and minerals are unknown. However, any new infrastructure is likely to require aggregates and could potentially cause water and soil pollution.	?	Mitigation measure: Further environmental assessment work is needed on all the schemes in Annex B before development goes ahead and appropriate mitigation measures need to be put in place. This work should address the effects of the schemes on water, soil and minerals. Annex B should make reference to the scheme appraisal processes that Somerset County Council has in place and should make it clear when and how this process will be undertaken.

The effect of the draft plan on natural resources					
Impact of the option (including if appropriate nature an of the impact, probability, duration, frequency and reve	-	Significance of the effect	Suggested mitigation and enhancement measures		
Implementation Stage (assessment of the Draft Implementation Plan and Technical Note on Transport and Development)					
A draft version of the implementation plan has been assessed. The final implementation plan is yet to be finalised and the levels of resources available to the County Council are not known. The plan stresses that maintenance of the highway network is likely to be a priority and that funding for other areas of the transport system is likely to decline. The fact that maintenance is remaining a priority will be positive for climate change adaptation as the funding should still be available to ensure that the transport system is maintained in a way that should help to reduce flooding and drainage issues, for example. However, in terms of emissions of CO <sub>2</sub> , without mitigation this could cause a significant negative effect in the short term as traffic is likely to rise as development and growth continues and in the absence of schemes to encourage modal shift. However, the council have now produced a document entitled "Transport and Development" and this outlines the steps the council will take to ensure that development is planned in a sustainable way. With declines in funding there is still a risk that negative effects may occur, but with the process outlined in the document above this will not be a significant negative effect.					

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# **Summary of performance:**

The policies in the Somerset County Council Transport Policies document largely perform well against the SEA objectives as they include measures to:

- Encourage modal shift;
- Manage traffic better; and
- Plan for the impacts of climate change.

All of these measures, when implemented (recognising that the assessment of the Implementation Plan has shown that they are not likely to be implemented in the short term), will help to conserve the natural resources of Somerset and reduce carbon emissions. In a similar way to the health, community and economy SEA objectives, many of the policies are likely to inter-relate to have a cumulative effect on traffic miles and therefore, carbon emissions. None of the policies assessed are likely to have a significant positive impact on the natural resources SEA objectives.

Some of the policies have an uncertain impact. This includes policies related to bus interchanges and walking and cycling networks which would benefit from

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consideration of how to integrate climate change adaptation issues into walking and bus interchange infrastructure – i.e. planning for suitable shade etc. The Taunton, Bridgwater, Yeovil and Wellington schemes in Annex B will also have an uncertain impact on natural resources. The Council has indicated that there are no details available on these schemes and their locations so the impact on natural resources has been scored as uncertain. Other policies likely to have an uncertain impact are the policy on parking and this is because of uncertainties about the intent of the policy regarding departure from parking standards.

The only policy that will have a minor negative effect is the policy on freight management. This is because Traffic Regulation Orders pose the risk that HGV routes are lengthened and so can increase carbon emissions.

As with the other SEA objectives, there is some uncertainty over the implementation of the schemes in the strategies and the Implementation Plan in its current form is likely to have a minor negative effect due to the likely reduction in funding available (it is recognised that the Implementation Plan is a draft and may change once levels of resources are known). The plan stresses that maintenance of the highway network is likely to be a priority and that funding for other areas of the transport system is likely to decline (funding could be cut by up to 50%). However, in terms of emissions of CO<sub>2</sub> the effect is likely to be negative in the short term as traffic is likely to rise as development and growth continues and in the absence of schemes to encourage modal shift.

#### Mitigation and enhancement measures:

#### Mitigation measures identified to address potential negative or uncertain effects are as follows:

- It would be useful if Policy 4 discussed climate change adaptation and integrated climate issues into work undertaken to improve bus stops and interchanges ensuring that shade is available at as many bus stops as possible, for example.
- It would be useful if Policy 7 and 8 integrated climate issues into pedestrian and cycling standards. Examples of measures include shaded walk ways, avoiding areas at risk from flooding, use of materials which don't contribute to surface water runoff etc.
- Further environmental assessment work is needed on all the schemes in –Annex B before development goes ahead and appropriate mitigation measures need to be put in place. This work should address the effects of the schemes on carbon emissions and other natural resources. The policies or their supporting text should make reference to the scheme appraisal processes that Somerset County Council has in place and should make it clear when and how this process will be undertaken.
- Policy 17 should make it clear what is meant by departure from the parking standards and whether this means that more parking would be sanctioned for certain sites.
- If Traffic Regulation Orders are taken forward as part of Policy 18 their routing should be carefully planned and monitored to ensure that they do not increase the level of carbon emissions unacceptably. The policy or its supporting text should commit to this.

## Enhancement measures identified in order to improve the performance of the plan are as follows:

- It would be useful if the final climate action plan stated how the Council could work towards climate change targets through the funding available in the short term and the schemes likely to be implemented.
- Policy 19 should outline what the community objectives are or are likely to be in different locations. It is suggested that these objectives should include

## **Assessment Conclusions – Natural resources**

reducing the unavoidable effects of climate change.

• Policy 19 would be more positive if it included consideration of responsible sourcing and sustainability of material

• If other measures can be included in the plan (apart from a Moped Loan Scheme) to promote smaller powered two wheelers they should be included in Policy 22.